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TITLE OF THESIS...INTENTIONALITY...AND..THE.....

..ASCRIPTION..OF...MIND.....

.....

UNIVERSITY...OF...ALBERTA.....

DEGREE FOR WHICH THESIS WAS PRESENTED...M.A.....

YEAR THIS DEGREE GRANTED.....1976

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THE UNIVERSITY OF ALBERTA

INTENTIONALITY AND THE ASCRIPTION OF MIND

by

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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF ARTS.

DEPARTMENT OF PHILOSOPHY

EDMONTON, ALBERTA

FALL, 1976

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled "Intentionality and the Ascription of Mind" submitted by William E. Seager in partial fulfillment of the requirements for the degree of Master of Arts.

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Date: AUGUST 17, 1976

Abstract

In the first chapter is given a rough survey of the views of intentionality of Franz Brentano and Roderick Chisholm. The direction of the survey is given by the question: "Can the mental be completely distinguished from the physical through the employment of some concept of intentionality?" It is shown that both Brentano and Chisholm (as well as various philosophers who have produced modifications of Chisholm's criteria of intentionality) fail to give a positive answer to this question. It is then noted that the modern (post-Brentano) attempts have concentrated on marking the intentional through an examination of the "linguistic traits" of certain expressions such as "believes that" or "seeks". This is seen as something of a weakness.

The second chapter revolves around the attempt to give a new set of criteria for the intentional, along the same lines as Chisholm, but much more wide ranging. This breadth is accomplished through the inclusion of "implicative clauses" in the set of conditions for intentionality, and these result in such expressions as "is in pain" and "has an obligation to" being counted as intentional. It remains, though, that the intentional does not (quite) mark out the mental. The chapter ends with the definition of an Intentional Characterization of an entity as the single attribution of a property to that entity through the use of an intentional expression.

Chapter Three attempts to employ these Intentional Characterizations in solving the difficulties engendered by this definition of a mental feature: "O is a mental feature if and only if O is ex-

emplified intentionally by an en-minded entity". Clearly, the main problems with this definition are the notion of "mental feature", the notion of "exemplify intentionally" and the provision of a suitable definition of "en-minded entity" that does not involve circular recourse to mental features. These difficulties are discussed and solved.

The thesis then concludes with a brief consideration of the problem that follows on the heels of the demarcation of the mental from the physical, namely, whether intentionalistic discourse is necessary in giving an adequately complete description of the world. It is seen that the answer to this is bound up with a multitude of perplexing issues in ethics, ontology and epistemology.

Table of Contents

Abstract iv

Ch. One: Views of Intentionality 1

Ch. Two: Intentional Characterizations 23

Ch. Three: Mental Features 49

Concluding Note 70

Notes 74

Bibliography 79

Appendix 82

Chapter One: Views of Intentionality

Franz Brentano, in Psychology From the Empirical Standpoint,[1] attempted to distinguish the mental from the physical in a clear and precise way. He produced several criteria to mark the distinction, "intentionality" being only one of these. Yet that one, "intentionality" has recieved more attention involving detailed analysis than any of the others.

Here, hardly at the beginning, one might already ask: why is a precise demarcative criterion required? Surely the distinction between the mental and the physical is well known to us all, perhaps, if by no other agency, through the "immediate experience" of our own mental states. Certainly, no one imagines that they will confuse a sensation of pain with, for example, a tree, in discourse. Of course, I may confuse an impression[2] of a tree for an actual tree, but no criteria of the mental will help me to avoid that confusion. In fact, is it not our pre-reflective understanding of the distinction which enables us to evaluate the various proposed criteria for marking the mental as opposed to the physical? Although the answer to this question is "yes", it does not have the force of obviating the task of demarcating the mental from the physical. The distinction between fire and heat is of some importance and is manifest in ordinary discourse (when we speak, for example, of a particularly hot fire), yet the task of selecting the proper criteria for marking the distinction revealed a great deal about combustion is general. Choosing criteria gives information, because to choose a criterion is to pick out some property of whatever is under consideration as being of special (one might say, essential)importance to that thing. Seen

in this light the task of selecting an appropriate criterion or set of criteria that distinguishes the mental from the physical seems less of an idle passtime, for while some of the properties of the mental may be obvious, they will not necessarily serve to differentiate the mental. Thus the ferreting out of further mental properties is of importance in understanding the essence of this aspect of the world. (Of course, our efforts may reveal that what we took to be a genuine aspect of the world is not in fact so -- but this would certainly be a valuable result.) What is sought is something truly characteristic of the mental.

Brentano states: "There can be no doubt but that the characteristic which is more distinctive of mental phenomena than any of the others is intentional inexistence"[3]. As this passage indicates, there were other characteristics available to him and it will be interesting to see if any of these has as much plausibility as intentionality has. (They are also of interest in that they are by no means unique to Brentano.) One of these attributes is that the mental is the "exclusive object of inner perception"[4], and, supposedly, thus possesses the rather odd property of "immediate, infallible self-evidence"[5]. This is, of course, very similar to the modern notion of incorrigibility. Now, there are some philosophers who hold this view today (for example, Rorty[6]), but they must all face this problem: many of our mental states are, <u>prima facie</u>, not known at all, let alone known incorrigibly. We are supposed to act, on occasion, under the influence of "unconscious" beliefs, desires, etc. These unconscious mental episodes can be broken into at least two groups: one, the "Freudian" type of totally repressed desires, and the like,

and the "purely dispositional" mental episodes. I suppose one could have doubts about the status of the "Freudian" episodes, but the second group appears, at least, less problematic. We often ascribe beliefs to someone of which we claim he is not aware of them at all, but nonetheless acts in accordance with them (his actions, of course, are the grounds for the ascription). Furthermore, it is possible that one could have such a belief and never have, so to speak, the opportunity to exhibit it -- that is, such a belief is intrinsically mental, not physical. Thus to restrict the mental to the incorrigible would appear to miss a great deal of the mental. Brentano, though indirectly, can be seen as attempting to answer this objection. In avoiding the charge that his position leads to solipsism (since none of us have a so-called inner perception of any mental phenomena except our own) Brentano states: "reference to the phenomena which constitute the realm of inner perception serves our purpose satisfactorily"[7]. This is of no help as it stands, but one might continue this line of thought and say that since some beliefs are objects of inner perception (a relatively incontestable position), then beliefs in general are in the realm of inner perception by a sort of extension. That is, we must postulate some form of conditional clause, as "if some members of a class are objects of inner perception then all members of that class are mental phenomena". This clearly goes far beyond Brentano, and the apparently necessary conditional is absurd, for it says that the class: {this pain in my toe, the moon, W.V. Quine} is a class of mental phenomena. Here I am not being unfair to my own suggestion. For consider, in the case of belief the conditional is of this form: $(\exists x)(x \in \{x:Bx\} \ \& \ Ix) \supset (x)(x \in \{x:Bx\} \supset Mx)$, where B = "... is a belief", I = "... is an object of inner perception" and

M = "... is a mental phenomenon".[8] Now the conditional may be perfectly alright in this case, but how do we characterize {x:Bx} in general? The conditional statement will only be true when B represents some mentalistic predicate, that is, when the x's are all mental phenomena, but that is what we are trying to demarcate from the rest of the world by using this conditional. The circularity is manifest. Yet if we stay strictly with Brentano an apparently equal absurdity results, namely that the class {x: x is a belief I am not aware of} contains no mental phenomena. This means denying that there are such beliefs, which, at worst, is just ridiculous and, at best, is a move of desperation.

Let me briefly consider another feature of the mental that Brentano considers adequate to demarcate the mental from the physical -- the "unity" of mental phenemena. "We can say this [that though there be a multiplicity of mental phenomena occurring at one time, in another sense only one phenomenon is occurring] insofar as the entire multiplicity of mental phenomena which appear to someone in inner perception always manifests itself to him as a unity ..."[9]. It is not completely clear what this passage intends, but even if it is true that "... the mental phenomena which someone perceives always appear as a unity despite their variety"[10] it is nonetheless true that certain mental phenomena are simply not percieved, hence neither perceived as a unity nor a variety. Hence this will not do to demarcate the mental, at least not completely.

It appears, then, that Brentano was correct in assessing the relative importance of his various criteria; it is now time to take a look at his criterion of the intentional. Brentano's own state-

is appealingly straightforward in what it claims, though less so in the manner in which it is claimed:

> "Every mental phenomenon is characterized by what the scholastics of the Middle Ages called the intentional (and also mental) inexistence of an object and what we could call, although in not entirely unambiguous terms, the reference to a content, a direction upon an object (by which we are not to understand a reality in this case), or an immanent objectivity."[12]

Very likely, the first thing that strikes one while reflecting on this passage is the vast number of (transitive) psychological verbs that are subsumed through its application. But one does not study philosophy (or any other subject, I suppose) long without becoming wary of statments beginning with "every" (and, of course, it is this "every" which has kept the discussions of intentionality going). Here, one might begin by asking what the object of a sensation such as pain would be. This is especially interesting in that while pain should be considered a problem for those developing criteria for the intentional (given that intentionality is to be used to demarcate the mental and is not merely an idle grouping of sentences or states) it is often ignored by modern philosophers. But it is tackled directly by Brentano -- in a way strictly parallel to his approach to the more "obviously" intentional states. In the case of pain, although certain sense modalities disappear (the pain of burning supercedes, as it were, the sensation of heat) others remain: "... we have the presentation of a definite spatial location"[12]. That is, there is a "content" toward which the pain is "directed".[13] There seems to be trouble here, though, for Brentano appears to have forgotten the distinguishing characteristic of intentionality -- that of inexistence. He says: "... when I hear an harmonious chord, the pleasure

which I feel is not really a pleasure in the sound, but a pleasure in the hearing of it"[14]. But if I take pleasure in the hearing of it then the hearing of it must exist. That is, like "seeing", to take pleasure in something, x, entails that x exists. If it is an hallucinatory symphony that I "listen" to then I take pleasure in the seeming to hear it. If by the object of our mental states we are "not to understand a reality" how can the "hearing of a symphony" be such an object? And yet if we relax this stricture then how do mental states differ from such states of objects as "hitting something" or "being behind something"? It seems that pain, and sensations in general, are closer to the non-mental than the mental, which is surely false. Further, Brentano's difficulties with sensations leads immediately to other difficulties -- with the cognitive states, for example, and the achievement states (seeing, hearing, winning, etc.). That is to say, "x knows that p" entails that p is true and, likewise, "x sees y" entails that y exists. In outlining the notion of intentionality, so far as I know, Brentano does not consider these sorts of states, yet they clearly represent a problem. (This oversight is perhaps due to Brentano's own views about knowledge and perception, but it seems a fact of current useage that the above entailments hold.) There is no case where a knowing is compatible with the negation of what is known -- there is, then, not even any kind of derivative inexistence here and, again, likewise with the achievement states.

But let me go to bat for Brentano for a moment. It I say that the cognitive states are a problem for him, this is true only if these states are mental. It is, perhaps, not totally clear that they are, because of what I shall call their "epistemic force". People know

things, so one would think that knowings must be states of people. If they are not mental states, then what can they be but physical states? Yet it is manifestly absurd to say that knowing is a (purely) physical state of a person (what would count -- weighing 175 lbs? being in the state of twirling one's arms?). One might try certain brain states (though why this should seem more plausible I don't really know) -- but they must not be identical with any mental state (whether one espouses the possibility of the identity theory or not). So one is left with such states as "having $15 \cdot 10^9$ neurons" or "having neurons x,y and z firing", and these are just as ridiculous as the above overtly physical candidates. Perhaps knowings are not states of anything at all. Then what might they be? Surely not physical objects. Perhaps some sort of abstract entity that people, on occasion, have. This sounds odd, but maybe it will work. If one tried to accept this doctrine I suppose that talk like: "I used to know that p" would have to taken as meaning something like "I used to have the knowledge that p" where the "have" is used in a rather special way. Upon some reflection, though, one sees that the burden placed on "have" in these contexts is more than this frail word can carry -- it certainly is a different sense than "ownership" (although, of course, a technical sense of "owns" could be introduced as well). One cannot claim ownership of abstract entities. In fact, it seems that the force of the "have" in "I have knowledge" is exactly the same as in "I have an hallucination" or "I have freedom", which are both excellent cases of being in certain states. Thus one should conclude that knowings are indeed states of people, though with a peculiarity -- that of epistemic force. A similar sort of argument, I believe, will go through with the various achievement states, in particular with the

perceptual states, and as well with certain "activity" states such as "playing such-and-such" and, perhaps, "flying" (as in "I am flying this plane").

The important point about these sorts of states is that they are pretty clearly involved with the mental; and thus if we hope to use intentionality as a mark of the mental then these states should, in some way, also be so marked.

So far I have argued that the notion of direction onto an object is inadequate to deal with some mental states, but even if it were so adequate a problem would arise -- the problem of the ontological status of these objects of inner perceptions (or whatever they are to be called). This is a large problem for Brentano, but I can't go into it here. I think, though, that enough doubt has been cast on Brentano's notion to make going into this problem unnecessary.

Thus Brentano's attempt to use intentionality, as he defined it, to demarcate the mental from the physical is incomplete at best, failing as it does to capture three important categories of mental phenomena. One is tempted to raise another procedural question: "Why continue to use this notion, or even something like it, of intentionality to mark out the mental?" I think that there are two main replies to this. (1) The success of Brentano's first, and admittedly crude, formulation of intentionality which does, indisputably, capture a vast number of mental states: desire, seeking, expecting, hoping (or perhaps better, hoping for), suspecting, etc. Such success in science would likely be enough to firmly instate the notion -- the relatively few perplexities would be left for future generations to sort out. Certainly, after such success one should not give up

after only one formulation. (2) The mental is a notoriously dark and slippery area; language, while not, of course, completely understood, is something we can look at objectively -- how people use words is open for all to hear. The intentional, it seems, can be delineated through the grouping of linguistic expressions and these are perhaps easier to grapple with than the "objects of inner perception". Furthermore, language, if anything is, is a product of mind. I think that one is only being reasonable in hoping that a certain class of expressions will elucidate notions of the mental.

Perhaps more that any other twentieth century philosopher, Roderick Chisholm has worked long and carefully on delineating the intentional and through it, the psychological. Though it may seem, at times, that his efforts have only offered scope for ingenious naysayers, it is undeniable that the sophistication of the attempts to adequately formulate criteria for the intentional has grown greatly. At the very least, may new problems have been broached. Chisholm's approach is much more linguistically orientated than Brentano's, involving the search for criteria to mark the intentional <u>sentences</u> (or, in a later formulation, intentional expressions). I believe that this emphasis on language has made the discussion rather more fruitful than one might expect work in this area to be.

While I do not intend to give (nor could I) a definitive outline of the "history of modern intentionality" it will be useful to examine some of the criteria that Chisholm has employed, to see what strengths and weaknesses they possess, and to see if, perchance, they share any common assumptions that serve only to make the distinction between

the mental and the physical unnecessarily difficult to draw. In his paper "Sentences About Believing", Chisholm offered, in essence, three sufficient conditions (presumably disjunctively necessary) a simple sentence must meet to count as intentional:

> "(1) A simple declarative sentence is intentional if it uses a substantival expression -- a name or a description -- in such a way that neither the sentence nor its contradictory implies either that there is or that there isn't anything to which the substantival expression truly applies.
>
> (2) A simple declarative sentence is intentional if neither the sentence nor its contradictory imply either that the phrase following the principal verb is true or that it is false.
>
> (3) A simple declarative sentence is intentional if it contains a name (or description) which has an indirect reference in that sentence."[15]

("Indirect reference" is here borrowed from Frege.) Chisholm also offered a fourth condition to cover compound sentences but we need not consider it, at least for now. Perhaps it should be noted first that these criteria do away with the problems about the ontological status of the objects of intentional states. I did not need to talk very much about this problem, but it is, nonetheless, good to have it out of the way.

Secondly, a class of mental phenomena which Brentano could not handle, the cognitive states of knowing, truly believing, falsely believing, etc. are dealt with through the use of the third criterion, which is, of course, merely that of the failure of substitution of identicals to preserve truth value. It is somewhat more difficult to see whether or not the achievement states (actually sentences about such states) are captured but I believe that, in so far as they represent some form of at least partially mental activity, they are sub-

sumed under these criteria. Suppose someone says: "x sees Pierre". It is true that in one sense of "see" the substitution of a co-extensive term for "Pierre" will not affect the truth value of the sentence. That is, one could as well say: "x sees the P.M.". However, I think that this is to neglect all the mental aspects of "seeing" -- it is the sense of "see" appropriate to the "seeing" that a television monitor does. Sometimes we use "see" in a sense that involves mentality, and when we do it is arguable that one could see Pierre and yet fail to see the P.M.[16] Although I believe that an argument along these lines is correct, there is no need to pursue the issue here, since, if these sorts of states are indeed captured by the criteria then it is the third criterion which does the job, and this criterion cannot be right independent of the issue of perceptual states. It is, quite simply, too strong (and I think this is quite well known). For consider: "Possibly, what is before me is not white" and now suppose that what is, in fact, before me is this piece of white paper; clearly it does not follow that "Possibly, this piece of white paper is not white". Yet it is absurd, at first glance at least, to suppose that anything to do with the mental is being said here. Prima facie, the third criterion must go, and with it the putative gain of the perceptual states and the definite gain of the cognitive states.

Furthermore, and of great importance, none of the criteria are such that sentences about sensations are included in the class of intentional sentences. I do not mean to assert here that Chisholm thought that his criteria did this job, but in as much as we seek to completely demarcate the mental or psychological from the physical this job should be done. Now it strikes me that this is a serious

omission for pains are surely mental phenomena par excellence; and this is no less so of any sensation, "phenomenal quality", "raw feel" or whatever. I suppose that it is true that one can consistently deal with pain, for example, in behavioristic ways -- but this is only to deny the mentalistic component of pain. Such a denial is, in general, unjustifiable. It may be perfectly proper in experimental psychology to define pain as, say, the physical state of an organism which causes more or less rapid withdrawal from stimuli, but this is not what pain is, unless these physical states can be shown to be sensations in which case, of course, there is no way to demarcate the mental from the physical since they are one. Few of the proposed criteria of intentionality deal with sensations (though, as we saw, it was to Brentano's credit that he did), even though the obviously mental character of such has driven at least one modern philosopher to a "new epiphenomenalism"[17].

Let me not labor longer over this set of criteria and, instead, proceed to another attempt by Chisholm[18], one which possesses great intrinsic interest, perhaps because of its rather abstract nature. Consider sentences, or at least, expressions, involving simple quantification: "for all x, x is F", or "for some x, x is F". Now, let us add an operator symbol, M. Several more expressions become possible through the permutations of quantifiers and operator; in fact there are now four possible expression-forms: (1) M(x)Fx, (2) (x)MFx, (3) M($\exists$x)Fx, (4) ($\exists$x)MFx. Chisholm names these four, respectively, UC, UD, EC, ED.[19] Relations of implication hold between these four expression-forms depending upon how one takes the operator. For illustrative purposes, and to have some fun, suppose that M is taken

to represent "it is possible that"[20]. Then implications hold between 1 and 2, 1 and 3, 1 and 4, 2 and 3, 2 and 4, 3 and 4, and 4 and 3 (plus the trivial self-implications). These relationships can be much more easily seen and considered through a matrix presentation, thus:

POSSIBILITY	UC	UD	EC	ED
UC	*	*	*	*
UD		*	*	*
EC			*	*
ED			*	*

Where the asterisk indicates that the implication holds, reading the items in the column as the implicans.

Chisholm, after rejecting an initial formulation due to Sleigh's counter-examples[21], claims that this matrix:

INTENTIONAL MODALITIES	UC	UD	EC	ED
UC	*			
UD		*	*	*
EC			*	
ED			*	*

captures all the psychological modalities. Chisholm concludes: "I know of no modalities which are obviously non-psychological and which conform to this pattern"[22]. It is a pleasant diversion to go through and check one's intuitions against Chisholm's. For example, he claims that, if one knows[23] that everything is black it does not follow that

there is something of which one knows it to be black. This seems alright to me, but perhaps there is room for doubt. In any event, Sleigh argues against the correctness of this matrix, specifically that it is wrong in regard to "believes that" and, as Sleigh observes, "if this were so, then we would not have found a logical mark of the psychological"[24]. The actual arguments that Sleigh presents need not be examined (I leave it to the reader to decide whether, with M = "believes that", ED implies EC), for, whether he is right or Chisholm all the argument is concerned with is the set of psychological modalities and a true mark of the mental must go beyond these. Now it may be that these modalities are all that Chisholm cared about, but then he is giving up the task initiated by Brentano -- that of distinguishing the mental from the physical. Such a narrowing of goals casts doubt upon the wisdom of continuing the development of criteria for the intentional. Intentionality is, after all, an artificial notion; one possessing a long tradition, but a technical one nonetheless. What is the point of restricting the notion rather than giving it up? Clearly, if one restricts one's goals in the face of difficulty one will eventually succeed -- but one will not have succeeded in much. So here again, since sensations (psychological phenomena if anything is) cannot be captured by this set of criteria we must give up this set.

Let me give one more of Chisholm's attempts, to show his ingenuity and also because this one has, perhaps, the most promise. It, too, involves quantificational contexts. I quote:

"Consider the two formulae

(1) $(\exists x)(\exists y)(y=a \ \& \ xRa)$

(2) $(\exists x)(\exists y)(y=a \ \& \ xRy)$

Let us here restrict the values of the variables to concrete entities. An expression which may occupy the place of "R" in such formulae could be said to be intentional if there is an individual term that may occupy the place of "a" with the results that (1) does not imply (2); (2) does not imply (1); and no well-formed sentence that is part of (1) is noncontingent."[25]

As it stands this is, of course, open to an objection similar to the one used against the last two sets of criteria -- namely the failure to consider a sufficient number of types of mental phenomena. But Chisholm throws in a perceptive rider: "... a well-formed sentence is intentional is it is consistent and implies a sentence that is intentional"[26]. There is hope that this might plausibly be thought to capture, at last, the phenomenal states. However, before considering this let us see if a straightforward counter-example can not be generated. To keep in line as much as possible with Chisholm's own example let "a" be an expression designating the next president of The United States. Suppose that the sentence "Ford is very likely the last (i.e. final) president" is inscribed at location L, call this inscription A. Further, let "R" be the expression "prima facie indicates, if true, the probable non-existence of ...". Finally, suppose that Carter is, in fact, the next president. Then $(\exists x)(\exists y)(y=a \ \& \ xRa)$ is true, that is to say, A prima facie indicates, if true, the probable non-existence of the next president of The United States. Here one might say that this violates one of Chisholm's conditions, that no well-formed part of (1) be noncontingent. If Chisholm admits of free variables, then xRa or "x prima facie indicates, if true, the probable non-existence of the next president of The United States" is a well-formed part of (1), but it is not a sentence (in this case it is appropriate to observe that xRa has no truth value). Perhaps

Chisholm meant that all instantiations of (1) should be contingent. If so, my counter-example still holds, for what an inscription indicates is surely contingent, though perhaps not what the "inscription's expressed proposition" indicates. Again, $(\exists x)(\exists y)(y=a \ \& \ xRa)$ is true but it is consistent with denying that anything prima facie indicates, if true, the probable non-existence of Carter.[27] Similarly, something may imply the non-existence of Carter without implying the non-existence of the next president of The United States.

The difficulty here is that I take it that inscriptions can indicate things -- Chisholm would argue (and indeed must argue) that this use of "indicates" is derivative, and derived from persons or "en-minded" creatures indicating things. It is true, of course, that only en-minded creatures can know what an inscription indicates, but how far this goes to further Chisholm's claim I don't know. Nonetheless, the counter-example stands until Chisholm concludes this argument (which he does not even consider while introducing this criterion), and so as it stands this method of delineating the intentional is inadequate. It remains to praise Chisholm for seeing that the class of intentional expressions should be widened through, if I may so call it, the method of implication (though Chisholm may not have intended it to do what I wish this method to accomplish).

So far, though, it may seem that the failure of Brentano's initial criterion to precisely demarcate the mental from the physical is not being much alleviated by Chisholm's efforts. Even if one ignores the phenomenal qualities (as Chisholm does) he has not managed to produce an unassailable set of criteria. On the other hand, his attempts have considerably increased our options in seeking such a

set, and have also increased our appreciation of the pitfalls to be avoided.

The above survey is a very bald one, and many philosophers, including Chisholm himself, have modified the various sets of criteria in the hope that a more satisfactory set could be obtained. It would not be fair to continue without giving something of an examination of these attempts.

Recall the first of these sets of criteria and one of its problems -- the alethic modalities. D. C. Dennett, in his book, Content and Consciousness[28] attempts to circumvent these objections by employing a tactic of Quine's, namely to treat an expression such as "9 is necessarily greater than 7" as an expression containing a quotation, viz: "'9 is greater than 7' is necessarily true", thus blocking the substitution that produces the counter-example. However this means giving up de re modalities, which is unpalatable, and I refer the reader to Plantinga's The Nature of Necessity for the arguments in favor of de re modalities[29]. Another way to avoid the counter-example is to interpret, somehow, the expressions in such a way that, for example, "the number of planets is necessarily greater than 7" is, in fact, true. I don't think that this is so implausible as it might, at first, appear; it turns upon taking "the number of planets" as a name for a certain number, in this case, 9. However, it is not so clear that this approach will weaken the counter-example that I gave above. That is, while "the number that is the number of planets is necessarily greater than 7" sounds somewhat plausible, "the thing which is in front of me, which is this piece of white paper, is possibly not white" retains an air of implausibility. It is certainly

true that we want to say that any particular piece of white paper might not have been white and thus, if we take "possibly not white" in this sense then there is nothing wrong with the above expression. However, that expression might be taken to mean that this piece of "white" paper is not really white, and in this light it is quite dubious and, if we accept the first part as true, an outright contradiction. Be this as it may, this set of criteria is subject to such difficulties as "prima facie indicates, if true, the probable non-existence of" engenders. And, of course, it fails to deal with sensations altogether. Apparently, Chisholm himself no longer thinks that this set will do.

Lycan, in a paper entitled "On 'Intentionality' and the Psychological"[30] tries to formulate a new set of criteria combining parts of Chisholm's first and second sets of criteria with some aspects of Anscombe's "The Intentionality of Sensation: A Grammatical Feature"[31]. Unfortunately, Lycan's criteria fail to capture the phenomenal qualities, as he realizes himself after giving a long list of psychological verbs that are intentional by his standards: "It will be noticed however, that the above list fails to include any of an important category of mental concepts: those involving bodily sensations ..."[32]. I should also note that Lycan believes that the most plausible way to bring sensations into the fold of intentionality is through the above mentioned method of implication.

Yet another, Cornman, in "Intentionality and Intensionality"[33] tries to show the adequacy of Chisholm's first set of criteria minus the substitutivity clause (i.e. condition (3)). To do this requires that he show that the cognitive verbs are not psychological. I have

previously argued against this, for it seems that, while the cognitive states are not, as it were, completely or purely mental since they possess epistemic force, they nonetheless do have a definite mental component (or aspect). It seems clear that only an en-minded creature could truly know something. Hence one would expect that the expressions "designating" these states should be picked out by a supposed criterion of the mental. This will be considered again in the next chapter. Also, as with so many others, Cornman fails to consider sensations. (I don't want to be unfair to Cornman, though. He is not writing primarily in the attempt to mark the mental. But in considering his criteria's adequacy for this task, which is what I am interested in, they must be found lacking.)

As to Chisholm's third criterion, it will be remembered that he had an interesting reply to my counter-example, namely that the sense in which an inscription can indicate (or mean) anything is derivative upon en-minded creatures (or, at least, speaking creatures) indicating (and meaning) things. The argument runs something like this: that an inscription indicates anything depends on that inscription standing for a sentence in a language ("standing for" must be explicated in terms of "being taken for" as applied to the language users) and sentences indicate things only by a further courtesy -- that people sometimes use sentences in order to indicate something. The expression "in order to" is clearly intentional. That is to say, in ways reminiscent of Sellars, that expressions like "'rot' means red" are to be taken, more or less, as "some people (the German speakers) use 'rot' as others (the English speakers) use 'red'". Chisholm does say: "... semantic sentences, as such, are intentional ... although ... this point, it is only fair to add, is controversial"[34]. It is plaus-

ible though. We do say, of people, "he means that ..." and this is surely intentional (in as much as it has similar properties as "believes that"). That is, to say "he means that Nixon is dead" after someone has said "the dispossessed king is dead" does not imply either that Nixon is or is not dead. So it is likely that semantical expressions are at least sometimes intentional. Given that, it remains to show (1) that this use (the one in regard to people) is fundamental and (2) that intentionality is "carried" from the fundamental to the derived. I don't know of any knock-down arguments for (1) except that it is difficult to argue against it. It seems intuitively clear to me that the use of semantical terms in regard to people must be basic. As for (2), we can legitimately legislate that derived forms of intentional expressions are themselves intentional if we are given (1).

Thus the suitability of the last criterion of Chisholm is unclear. Nevertheless, it retains something of an appeal through the use of the implicational clause. Later I shall argue that such a device is sufficient to remove the difficulties encountered in the consideration of the cognitive and achievement states and, as well, sensations. Thus if the semantic argument goes through, this last set may be adequate in marking out the mental from the physical.

In this chapter I have examined modern attempts to define the intentional as the attempt to succeed, where Brentano failed, in distinguishing the mental from the physical. None of these attempts has been entirely successful, and one might wonder whether or not some underlying assumption is bedevilling them. I think there is such an assumption; it can best be brought out by examining the modern

response to what I shall call the First Thesis of Intentionality (TI-1), which was stated by Brentano thus: "... we can define mental phenomena by saying that they are such phenomena as include an object intentionally within themselves"[35]. Now consider a modern formulation of something at least close to TI-1, by Chisholm: "... no expressions designating nonpsychological phenomena have the logical properties that the expression "R" has ..."[36], where these properties are, of course, Chisholm's definition of intentionality. This proposition is equivalent to: "for all expressions, if they are intentional then they pertain to the psychological". But clearly this is too weak, for it leaves open the possibility that some psychological expression is not intentional. Chisholm is unclear on this point, but I believe that he, too, wants more as he immediately goes on to say: " ... if this is so, then what distinguishes the psychological from the physical is 'etwas relativiches'"[37]. But this does not follow -- all that does follow is that some psychological expressions are distinguished from the "physical" expressions by intentionality. So let us strengthen Chisholm's position and state the modern TI-1 as: The intentional expressions completely mark out the psychological expressions. Is this not the background assumption of modern work on intentionality, that the intentional can be discovered by examining the "linguistic habits" of certain expressions. Looking at the problem from this vantage point has, I think, done a lot to further work on the intentional -- but what is missed is the complexity of the mental. What is missed is that we <u>use</u> intentional expressions, to a greater or lesser extent, to characterize entities within a <u>system</u> of concepts. By concentrating on these characterizations perhaps

a new slant could be given to the problem. This is the goal of what is to follow.

Chapter Two: Intentional Characterizations

The world is populated, not only with a vast number of things, but also, it would appear, with a vast number of types of things. One might then go on to observe that each type of thing is also a thing, and so on *ad infinitum*. In talking about the mental it is not entirely clear what the range of the mental predicates is, that is, we *may* want to ascribe mental features to all sorts of things. I hope to retain as much generality in these matters as possible; thus, let me appropriate the term "entity" and use it to refer to anything that can be picked out in discourse. Thus types of things are, indeed, entities, and so are properties, numbers, species, etc. But I make no claim that the entities of which I speak actually exist -- even if, for example, there is a sound Idealist argument to the effect that there are no physical objects (however such an argument might go) it should not affect me, though perhaps it would necessitate the translation of some of my statements into the proper Idealist terminology. Given this "universe of discourse" we may speak of the attributes of entities, and also consider these attributes as entities admitting of further predication. That is, one may say "a is red" and also "red is a universal", or "b is circular" and also "circularity is a property".

Now, most often our attributions of predicates to entities are directed towards medium sized physical objects but this is not universally true. In fact, in the case of persons it is, I think, unclear whether or not in our attributions of properties to them we classify people with other similarly sized, textured and mobile physical

objects. This can also be left open. In any event, there is no doubt that we do characterize things, people being included among those things. And we characterize things as being such-and-such (either through the attribution of simple predicates or more or less complex relational attributions) -- let us call the class of the such-and-such's the set of properties and relations. This class will include such things as "being heavier than ..." and "being red", but also "believing that ..." and "being in pain". I suppose that, roughly, this set could be defined as the class of all things that could be predicated of something. While there would probably be difficulties in precisely defining this set, the notion of predicate or "predicative expression" is, surely, intuitively clear enough to work with.

Some of the problems in the later attempts to formulate criteria of the intentional arose from the restriction of these criteria to sentences. Let us try instead, then, to consider predicative expressions (expressions designating properties and relations) and ask: Can we define over the predicative expressions a notion of intentionality that will serve to mark the distinction between the mental and the physical? This notion may not be very similar to the older notions of intentionality, but that is not a criticism of it. Chisholm's linguistic approach was a radical alteration of Brentano's "ontological" views, and more changes may be required if intentionality is to accomplish the task set to it. The previous chapter's critique of earlier outlines of intentionality should help us to avoid certain trouble spots, and perhaps also help us to realize that some supposed trouble need not bother us so much as was thought. I shall proceed by considering intentional relations first, and then go on to the

intentional properties. Perhaps a definition of an intentional relation could begin something like this:

(1) R is a basic intentional relation between entity x and proposition p if xRp does not entail either that p is true or that p is false.[38]

This is, of course, very similar to Chisholm's first criterion in "Sentences About Believing", and there is nothing wrong with it because of that. Here it should be noted that the appropriate R's will not be simply transitive (and hopefully psychological) verbs but rather such verbs with "that" or something to that effect appended to them. Examples of these are well known and include: "believes that", "hopes that it is the case that". I use the word "proposition" merely to indicate the applicability of "true" and "false" to the referent of the second term of the relation. Propositions are entities, as that term is to be used -- they can be and are picked out and discussed in discourse. So (1) could have been phrased without explicitly mentioning propositions, but then I would have had to add the condition that the properties of truth and falsity are applicable to the referent of the second term. My use of "proposition" can be considered as merely an economical method of including this condition (it certainly aids us in understanding the criterion). This condition is necessary to deal with certain expressions that seemingly take a proposition as the second term. Such expressions as "... causes it to be that ..." demand the truth of the second term, and hence the truth condition of (1) prevents them from being considered as intentional. This last discussion points out an obvious weakness -- clearly there are psycho-

logical relational terms that do not involve entities to which truth and falsity are applicable. So:

(2) R is a basic intentional relation between entity x and entity y if xRy does not entail either that y exists or that y does not exist.

Under this clause are subsumed such eminently psychological states as are expressed by "Richard wants his dinner", "x expects to hear from y" (here R = "expects to hear from"), etc. However, one can also perceive a certain tension between (1) and (2), that is, if I believe that Trudeau is the Prime Minister, does that imply the existence of propositions? One might think that (1) is unnecessary, that propositions can take the place of y in (2). I don't think that this correct however. If I do believe that Trudeau is the P.M. this <u>does</u> imply that there is something to which truth and falsity apply, and whatever they are, I am using the term "proposition" as a convenient designation for them (perhaps they are sentences, or equivalence classes of sentences).

But perhaps the second clause is the redundant one. One could argue, as does Dennett[39], that all forms subsumed under (2) could be paraphrased into "propositional form" capturable by (1). However, there might well be greater plausibility in arguing that the forms typically caught by (2) are actually the basic ones (to argue this way would not be to contradict Dennett, only to argue over the best way to "run" the paraphrasing). Certainly, it is artificial at best to say that when x wants y this amounts only to "x's wanting it to be the case that he has y" (or, "x's wanting that y be his"). But this is a sterile argument in that both sides could probably get along

equally well without even considering the claims of the other. That is, since Dennett is forced to allow himself the use of some dubious paraphrases the reader may well be led to agree that, in a way, Dennett could make good his claim; but in view of the difficulty and artificiality of these attempts I think it best to keep both conditions as a way of, at least, sidestepping this problem. (As an ex- of extreme difficulty in paraphrasing let the reader consider what the "propositional form" of "x is dreaming of y" would be.)

At this stage, my two conditions mirror the first two criteria of Chisholm's first attempt, the only difference being that my conditions are not applied to sentences. This leaves me with all the problems that beset a follower of Chisholm at this point. First of all, what about the cognitive states? I spoke praises of the "method of implication" in the discussion of Chisholm's third attempt at formulating criteria of intentionality, above. Let me now try to make good these praises:

(3) R is a derived intentional relation between entity x and proposition p if xRp <u>entails</u> that some basic intentional relation holds between x and p.

I must recognise the difficulties in elucidating the notion of "entailment". O'Connor,[40] in "Tests for Intentionality" argues, against Chisholm, that the lack of clarity of this notion vitiates the attempt to set up criteria of the intentional. However, while there certainly is a problem here it does not seem a problem which workers on intentionality should have to deal with. One can appeal to an "intuitive" idea of entailment. There <u>is</u> such a notion, and people

do employ it.

But to return now to the main line, I shall take the senior member of the cognitive states first. Consider "x knows that p". Is there anything of the sort required entailed by this? Well, one might say "x believes that p". This is something of a controversial point. To my ear, it is very odd to say "he knows it but he doesn't believe it". Here I want to take the line of many philosophers[41] and say that if one knows that p then one at least believes that p. Suppose that I know that the Joneses are coming for dinner. It would be misleading for me to say that I didn't believe that they were coming, and if I say something like "I don't believe it, I know it" doesn't this have the force of "I don't just believe it". One might imagine the case where I profess to disbelieve that the Joneses are coming and yet my actions lead you to say "Ah, but really he knows differently". But, of course, such a situation gives as much credence to the statement: "Ah, but really he believes differently". In arguing against Brentano's "self-evidence" criterion of the mental I exploited the plausibility of talk about "unconscious beliefs" and I can appeal to this plausibility again here. If one is permitted, in this situation, to say that I can have "unconscious knowledge" then it seems equally justified to say that I can have unconscious beliefs.

In this I am not hoping in any way to extract favorable associations from the "justified true belief" theory of knowledge. I claim that knowing something implies at least believing something. I do not claim that believing something, as well as meeting whatever other conditions are traditionally required before knowledge is "obtained", is logically necessary and sufficient for my knowing something.

There are other cognitive states as well. One can be said to believe falsely that p, but only if one does believe that p. Let me again emphasize that the cognitive states are not, as it were, pure mental states because of the "extensional" factors included in them (what I call their epistemic force). That is, to know that p requires that the world be in a certain state (roughly, the state designated by p) but it also requires that the knower be in a certain state, which state includes, at least, a mental component. Strictly speaking, this mental component need not be thought of as belief; the point is that some propositional attitude must be "in" the knower. One might prefer to label this "acceptance", or something similar, and replace "belief" with this term throughout the above. In general, what can be called the mental component of cognitive states will suffice to make good a few of the proper entailments.

It will be worthwhile to digress here briefly and consider the use of such words as "know", "realize", etc. Suppose there to be a machine that took fingerprints and "compared" them with fingerprints already on file. (It may be thought of as doing so through one of the feature comparison programmes quite common today.) If the fingerprint taken matches one of those on file, the machine opens a door, permitting entrance. Such a device might well replace locks and keys in large apartment buildings. Could we say that this machine <u>knows</u> that Smith's fingerprint has these and those features? As these machines became more and more common we might very well be tempted to say this, but how much of an extension of the notion of knowledge would this be? What, then, should we say of a spring scale that indicates, perhaps by flashing a light, the placing of a two kilogram

weight on it? The two cases are not really very far apart on a continuum. I think that whatever attractiveness there might be in so using these words in such cases would derive from our emphasizing the machines' successes and reliability at the expense of the mentalistic component. That is, achievements could be favored at the expense of consciousness and deliberation; the extensional factors could become the major consideration in applying these concepts to objects. But clearly this is not the whole story for I suspect that we are much more likely to balk at the ascription of knowledge to the spring scale than to the "fingerprint scanner". In applying an open-textured concept there is a point at which we are simply unsure what the appropriate description is. Perhaps "knows" has a sense that is simply not psychological. Such a dichotomy, however, need not necessarily be of much concern since there are many cases where a word can be used in both a psychological sense and a non-psychological sense. Some of these will be met in what follows.

To return now to the main line of argument. There are also terms for episodes and states (similar to the cognitive states in that they possess epistemic force) which are "pseudo-perceptual", like: "sees that p" and "hears that p". Of course, one must not be fooled by this use of words that also refer to the operation of the senses, for in this use these expressions are perhaps closest to "realizes that p". As in the case of "knows that p" one cannot apply "sees that p" to something without implying that it "believes that p" or "comes to believe that p". One might also consider a class of expressions that on one use meet condition (1) and yet on another use represent a roughly cognitive state and hence are captured by condition (3). I am

thinking of expressions like "understands that". In some cases, it is clear that if I say, for example "I understand that Hitler was a Jew" this does not in any way entail the truth of "Hitler was a Jew". If, however, after taking a course in, say, fluid dynamics I say "Now I understand that pressure is proportional to density" this would seem to entail the truth of "pressure is proportional to density". Be this as it may, these expressions, too, pretty clearly entail that some sort of belief expression is applicable. Thus it is plausible that the implicational conditional (3) does manage to capture the various cognitive and near cognitive states.

Closely related to the cognitive states and episodes is a subset of what might be called the "achievement states and episodes", common examples of which are designated by expressions occurring in such sentences as: "Renshaw suddenly saw the duck" or "Dorothy listened to the Munchkins for hours". These are the actually perceptual states. To handle these a slight modification of (3) is required, a modification which mirrors the difference between (1) and (2):

(4) R is a derived intentional relation between entity x and enitity y if xRy entails that there is some basic intentional relation R*, and some proposition, p, such that xR*p.

Before going on, let me say that I think there could be a parting of the ways here that I could not reconçile. In the foregoing I have alluded to the interesting possibility that it is not, perhaps, necessary to regard perceptual states as having any mental component at all. Champions of this position should have to accept the thesis

that it is perfectly acceptable, though admittedly unnatural, to say of a stone that it perceives the ground it is rolling over; after all, the stone "acts" as if it were observing (in an attenuated way perhaps) the ground, i.e. it behaves accordingly (where "behaves" is taken in a completely neutral sense). And I suppose that one could consistently hold this position (as perhaps Whitehead does[42], though it is unclear whether he rejects mentalistic readings of perceptual expressions or whether he extends mentality throughout the continuum of nature). To such people, plants perceive the sunlight and burglar-alarms perceive objects (though certainly not as burglars). It seems, though, to be an odd position. I would prefer to use a different expression, perhaps "responds", or, at any rate, something less likely to call forth mentalistic associations, when I am describing the "behavior" of plants, rocks and burglar-alarms. I prefer, in fact, to count as a valid inference the move from "x sees y" to "x believes that there is something out there" (though x neither has to know, nor believe, that he so believes). But either account is consistent with my position. If the first is accepted then the perceptual states are not psychological and it is then very proper that they fail to entail any intentional expressions. On the second view they do after all entail certain intentional expressions and hence are themselves intentional, but in this case they are also involved with the psychological.

(4) captures other mentalistic expressions as well. For example, consider "x loves y". It may be that another dichotomy presents itself here for it is not absolutely clear whether or not "x loves y" always entails the existence of y. If it does not (and, of course,

it certainly does not entail the non-existence of y) then it is captured by condition (2). But it appears that in most cases the entailment holds. As a possible counter-instance imagine a child saying "I love Santa-Claus". If we accept this as true then there certainly is no entailment. (But in this case we will say that the child believes that Santa-Claus exists, which perhaps indicates that the use which does entail the existence of the loved one is basic.) If one said "I love DeGaulle" and was then told that DeGaulle was dead it would be appropriate to retreat to "I used to love him". And while this move is not obligatory, if it is not made some qualifying remarks are in order, such as "it is the memory of him that I love" or "his personality yet exists (in the realm of the abstracts) and that is what I love". Thus it seems that there are conventions of use whereby one cannot be said to love (nor hate, insult, etc.) that which does not exist. But it can hardly be doubted that on this useage many belief statements are entailed, at the very least, "x believes that that which he loves exists (in some sense or other)". In either case, then, these expressions are captured, by condition (2) or (4).

Yet another class of expressions, characterized perhaps as those which designate "activities" are caught by condition (4). By these I mean such expressions as "is hanging", "is intimidating" (of course, there is a sense of "intimidates" that is closer to an achievement than an activity but let us concentrate here on the activity of intimidation). In "On the Indispensability of the Intentional", Morick says, and I think rightly, "But are hanging a man and riding a horse merely physical activities? I think it is clear that they are not"[43]. Here again a dichotomy of usages must be considered. For example, one can be intimidated by a steep slope, but it would be absurd[44] to

suppose that the slope believed that it was intimidating you. Whereas, if someone is intimidating you it is equally absurd to think that he doesn't desire to or believe that he is (but one may intimidate unintentionally but in that case certain features that one possesses simply overwhelm, as it were -- and in this unintentional intimidation is like intimidation by a steep slope or other inanimate object). This dichotomy arises through alternatively emphasizing the doer of the action and the one to which the action is done. Thus I can be intimidated by a steep slope (or by Bobby Hull, just in virtue of his abilities) or I can intimidate a bear (if I am good enough). In the first case I believe that the climb might be too much for me (or Hull too much for me), in the second I mean to scare off the bear. The mental aspects revolve around me and this is where the proper entailments come in, for they involve my hopes and fears. Hanging is a more blatantly social activity, perhaps, than intimidation and it is clear that one cannot hang someone without having certain beliefs (if there was a complex machine designed to hang people, the operator of the machine would be the "hangman" -- the rope does not hang anyone). I should point out that I am only concerned with the social "punitive" act of hanging. Clearly there is another use which does designate a purely physical activity (this use is marked by the past tense construction: clothes are hung, people are hanged).

There is another class of expressions to be considered, they fall somewhere in between achievement expressions and activity expressions. I mean such expressions as "wins", "scores", "lands" (as in "he lands the plane"). It should no longer be surprising that a splitting of useages occurs again here. That is, there is a sense in which one

can say of a turtle: "it won the race". This is the same sense as is employed when one says of a model car that is let roll down an incline beside several other such models: "it won the race". On the other hand, there is clearly a sense in which the winner of a race must believe that he is in a race. An example like that of the thief who, in running from the police, just happens to fulfill the external conditions of running a race brings this out very well. This second use pretty obviously implies, as Morick says, that the winner have "a state of mind or at least consciousness in general"[45].

Thus far two prevalent dichotomies of use have been noted. One, that a word may have two uses, both of which are intentional by my criteria, and both of which are psychological (eg. "loves"). Two, that a word may have both an intentional and a non-intentional use (eg. "wins"). This is because under some uses certain entailments fail to hold, however, I trust that it has been adequately shown that when used non-intentionally there are no overt psychological features associated with the use of that word (more on this later). The first sort of dichotomy is of little concern, since taken either way the expression counts as intentional; but the second sort may give rise to confusion. One way to avoid difficulties would be to use a system of subscripts (not unknown among philosophers) to mark the different senses of various words or expressions. Thus, one could use "win_1" to refer to the intentional use of "win" and "win_2" to the non-intentional use. While this could, conceivably, prove effective I do not think that it is necessary. Instead, we may say that a relational expression between x and y is intentional if it has at least one use that is (either basic or derived) intentional. How this position

will modify the stance on how intentionality marks out the mental will be seen later.

Thus far I have only considered intentional relations, but properties must be examined as well, so:

(5) F is a derived intentional property of an entity, x if and only if Fx entails that there is a basic intentional relation, R, and a proposition, p, such that xRp.

For example, "x is an hedonist" will entail some belief statement of x, such as "x believes that pleasure is good". It is a virtue of the implicative condition that it captures properties which, though only obliquely psychological, cannot enter a discussion without involving psychological elements. Consider "x is a good liberal" (in the sense of "liberal" that refers only to the political party so named). Surely only a conscious, en-minded creature could be a liberal, and surely, "x is a good liberal" entails that "x wants to do what is good for the liberal party, as x construes what is good for the liberal party". Hence, "being a good liberal" is an intentional property, which result is desirable since the phrase does in some intimate way invlolve the psychological.

Besides these sorts of properties there are very many others that are, perhaps, rather more directly psychological. Examples of these are referred to in such sentences as "x is happy", "x is sad" and "x is intelligent". Consider the case of sadness. Could one be sad and not know it or not believe that one is sad? It seems that one could indeed. We might well say of someone: "He is sad, but has fooled himself (however this can be done) into believing that he is

not", or something like that. There are difficulties here, for we may well wonder what possible truth there could be in saying of someone who acted all his life as if he were happy that in fact he was sad. Secondly, one could argue that to be sad is to suffer, and, it will be argued later, suffering implies awareness[46]. But, though aware that one could argue the other way, let us take the putative entailment of "x believes that he is sad" from "x is sad" as doubtful. But could one be sad and no believe that, hope for, wish that anything? The implicative conditional of (5) is of this form:

$(x)(Fx \supset ((\exists R)(\exists p)(xRp))$.

It is not of this form: $(\exists R)(\exists p)(x)(Fx \supset xRp)$.

It is abundantly clear that something can be heavy and not believe anything (but if something is heavy then it must have many other physical properties as well) but sadness is another matter. Just what "x is sad" entails may be difficult to determine, but I cannot imagine that something could be sad and stand in no intentional relation to any proposition. For the negation of the conditional of (5) is of this form: $(\exists x)(Fx \ \& \ (R)(p)(-xRp))$. Now, surely, the burden of proof is on my opponent -- let him find something that is sad but which does not stand in any such relation. The magnitude of this task is, I think, staggering. He would have to produce an entity -- some sort of device? -- which was capable of being sad and which actually exemplified sadness but which also exemplified <u>no</u> relational mental attributes at all. Suppose that I am introduced to something, call it x (it is unclear whether such a thing, even if it looked human, would be considered a person) such that of x it is claimed that x is sad, but undergoes no other mental episodes. Suppose that x does look

human, so I am more likely to consider the possibility. I ask: "What happened to him?" "A car accident -- he went into this state of pure sadness." Well, I say he is not sad -- if anything, he is in a coma. One should not belabor this point too much. Surely sadness, intelligence and the like are mental attributes that people have in having or being capable of having a whole system of distinctively human(?) psychological properties. In this we can liken such properties as sadness to others, for example, "having momentum". Anything which has momentum must also possess a myriad of other properties forming the system of "physical attributes".

Perhaps along the same lines as this I can deal with another sort of mental property, one that was the major difficulty confronting the earlier criteria of intentionality considered in the first chapter. It is also one which will provide the most difficulty for my condition (5). I mean, of course, the phenomenal qualities, sensations in general. A paradigm case of these is "having a pain" so let us examine "x is in pain" and see if it entails anything of the sort required. To begin with, let us ask: Can one be in pain and not know it (or believe it)? Of course, one can be in pain and not know the word for the state one is in. This raises the question: Can one have knowledge without language? I think that one can. I think that when a dog is in pain he knows it, and believes it, and wants the pain to stop. On the other hand, when a virus is being damaged it doesn't know anything, but it also is not in pain. (There are borderline cases as well -- that is, cases where we don't know what to say.) My argument could show this to succeed: if something is said to be in pain, then it must also be said that that something

knows that it is in pain. It might also succeed by showing something like this: if an entity can be said to be in pain then it must also be said that that entity wants the pain to stop. Take the case of a child with congenital heart defect such that, as we would say, he is in constant pain from it. Because of the constancy of the pain the child, as he learns the language, will not have the variation of sensation necessary to learn that how he feels all the time is a kind of pain. If he does learn that he is in constant pain he will learn it, as we might say, only intellectually, that is, only by being told that he is. He will learn that when he cuts himself, for example, then he is in pain. This might seem to be a clear-cut case of not knowing that one is in pain (particularly if we add the condition that he has never been told that his condition should create pain). So it might seem, but it is really closer to the case of the infant who simply cannot tell us that he is in pain. For, after an operation to correct his heart defect, the child then knows that he feels better, and if he did not know, in some sense, how he felt before, how could he notice any difference? The child might say to himself: "so that was pain, as they tried to tell me".

In the case of infants, and, I suppose, animals, the alternative to saying that they know that they are in pain is not, of course, that they do not know when they are in pain but that they do not know anything at all. Denying them the capacity to have knowledge (presumably because they cannot speak) might have some plausibility. But in this case it would imply the odd consequence that we should not attend to infants to alleviate their suffering but only to save their systems from damage and to quiet them for our own convenience. For one can-

not suffer from pain unless one knows or is aware that one is in pain. A pain-killing device that only took away the awareness of pain would not be subject to criticism, for taking away the awareness of pain is just what such devices are supposed to do. Now, one might want to say that the pain remains but that the awareness goes, and with it the suffering. In fact, I think it rather more plausible to hold instead that with the awareness goes the pain, and this supports my views; but both modes of discourse tempt us. However, the bad thing about pain is the suffering which is tied to awareness. We soothe infants, and anything else we take to be in pain, because if we say that it is in pain then we say that it is aware of the pain and hence is suffering, hence that it deserves soothing. But what of the other mode, that leads us to speak of unfelt pains -- if there are such things my position fails. I believe, though, that this is just another of the sort of dichotomy of useages that was observed so often above. On the one hand, there is a temptation to say of certain conditions (like that of pain) that they can continue although unfelt while one's attention, perhaps, is directed elsewhere. However, here we mean that the cause of the pain remains, that is, there is almost as much reason, in so far as one's external condition goes (the damage or whatever), to say that one is in pain as there was a minute ago (when both the damage and the complaints were there). On the other hand, there is an equal if not stronger temptation to say that if one does not feel the pain (i.e. know that one is in pain) then the pain just does not exist. Note here that in cases where we do speak of unfelt pains it is where there is no conflicting report from the one supposedly undergoing the pain -- if he insists that he feels

no pain, or acts as if he does not we are unwilling to contradict him. Talk about the causes of pains is not mentalistic, talk about the awareness of pains is.

Is this really satisfactory though? The objects of knowledge or awareness, it might be claimed, are propositions and surely, it might also be held, something can be in pain without knowing any proposition to be true. It is difficult to say what this objection amounts to. What is it to know that a proposition is true? Of course, an infant could not accede to any question, or check an answer on a questionaire, but why should that sort of thing be necessary for it to be said that the infant knows when he is in pain? It might be replied: "One must behave 'appropriately to the content of the proposition'" but, while this is true, infants, of course, do so behave. If a child finds that lying on his stomach relieves the pain, then he will so lie. Isn't this behavior as good as many a verbal answer to the question "are you in pain"(which, after all, the infant cannot even understand)? One might explain the infant's behavior in purely "mechanical" terms (i.e. terms involving accepted scientific concepts supposed to be adequate to explain the infant's behavior), but then what role does pain play -- not a mentalistic one at any rate. Is it not the case that if we put an entity into the "logical space" of pains, then we put it as well into the space of "awareness" and, indeed, innumerable other mental states?

But, it might be said, one must have the concepts that "make up" the content of the proposition if one is to know it. That is, a child cannot know that its mother is near without having the concept of "mother". Again it must be remembered that a child may well know that

its mother is about and not know what a mother is called, just as I may know what a screwdriver is and not the name "screwdriver". Well then, a child must acquire this concept (actually a weak analogue such as "that woman" or "that thing") at an early age, for children do recognise their mothers, as the being that stands to them in a (probably indefinable) special way, long before they can speak. Either we explain this recognition in terms of concepts (i.e. mentalistically) or "mechanically",and if mechanically then "recognition" is being used in an extended sense. Why can we not say that the concept of pain is acquired with the first twinge? The extended concept of pain, as something which everyone feels, and so on, need not come at the same time. It is not that the child knows that pain hurts. It only knows that it is hurting.[47]

Thus I conclude that pain is intentional on my criteria, since the proposition that one is in pain, taken as a mentalistic description, entails that one is suffering or that one knows that one is in pain. Along with pain come the other sensation terms, including those like grief (mental pain?) that perhaps lie halfway between sensations and states such as happiness and depression.

Thus ends the list of criteria for intentional expressions. Before going on to consider further objections to them, let me here list them as a unit:

(1) R is a basic intentional relation between entity x and proposition p if xRp does not entail either that p is true or that p is false.

(2) R is a basic intentional relation between entity x and entity y if xRy does not entail either that y exists or that y does not exist.

(3) R is a derived intentional relation between entity x and proposition p if xRp entails that some basic intentional

relation holds between x and p.

(4) R is a derived intentional relation between entity x and entity y if xRy entails that there is some basic intentional relation, R*, and some proposition, p, such that xR*p.

(5) F is a derived intentional property of an entity, x, if and only if Fx entails that there is a basic intentional relation, R, and a proposition, p, such that xRp.

It was also stipulated that an expression is intentional if it has at least one use that is intentional. If an expression is intentional by virtue of certain implications then it is a derived (intentional) expression, and if not, a basic expression. Furthermore, if every use of an expression is intentional let us say that the expression is "rigid", and if not, "flexible". So, for example, "believes that" is a rigid, basic intentional expression. "Lawfully hangs" is a rigid, derived expression, and "wins" is a flexible, derived expression. (I suspect that if an expression is flexible then it is derived, but will not consider this here.)

One objection that could be made has to do with the modality of possibility. Perhaps, "x is possibly identical to y" contains what on my view is an intentional expression. This will not be so, however, if all identities are necessary, which I think is true. Thus, if the above expression is true (and if identities are necessary) then its truth entails the existence of y. This is clearly also the case with such expressions as "x is possibly to the right of y" and "x is a possible descendent of y". There are further problems though. The form of (i) "The tallest man is possibly ten feet tall" is, I would argue, Fx and not xRy. (This ignores the additional complexity of the definite description; perhaps for complete precision we should have this: $(\exists x)(y)(xRy \ \& \ Fx)$, where, of course, R = "is taller than"

and F = "is possibly ten feet tall", with the domain restricted to men.) There would be no question about "The tallest man is ten feet tall" -- its form is Fx (or, at least $(\exists x)(y)(xRy \ \& \ Fx)$ for complete precision). In (i) a certain predicate is being assigned to the tallest man, and although the predicate is complex it is a case of simple predication nonetheless. Thus, (i) is not intentional since it does not fulfill the conditions imposed by clause (5) of my list of criteria of the intentional.

However, the sentence (ii) "The weather makes it likely that the meeting will be cancelled" contains the expression "makes it likely that" which is apparently intentional. That is, the sentence seems clearly of the form xRp and does not entail either the truth or falsity of p.

It is possible that the proper analysis of the notion of "possibility" will show it to have inextricable conceptual ties to a "judgement system" or a "system of epistemic criteria" which only en-minded creatures could form and enter into (I owe this suggestion to Dr. W.W. Rozeboom). In the absence of this analysis, however, I feel uneasy about proposing this as a solution to the difficulties encountered here. The contrary position, that possibility does not have anything to do with the mental, seems intuitively more plausible. For the moment I can go no further on this problem, but I will return to it in the next chapter.

Perhaps the major objection to clauses (1) and (2) is the one involving semantical terms. The expression "means that" is undeniably intentional (by clause (1)). Here I must again take up the argument of the first chapter, that the use of semantical terms in re-

lation to signs, inscriptions, sentences and so on is derivative and derived from the use of these terms with respect to persons. If this is taken as an historical point then surely it is correct. For people must have said of other people that they meant such-and-such or were indicating so-and-so long before they said of linguistic types or tokens that they meant or indicated anything. It is a plausible story that from "he means that p" early language users would proceed to "by speaking/saying S he means that p" and finally to "S means that p". Of course, historical priority is not the same as logical priority, but where this is unclear a plausible history gives us grounds to assign logical priority. Also, if anything is an element of a language then it has meaning because a typical speaker can use it to mean something. For example, two spies might devise a proto-language with but two sentences: (1) My guest is "alright". (2) My guest is to be eliminated in the usual fashion. The way one spy arranges the furniture in his room may indicate to the other either (1) or (2), and thus the spies may say: "The divan being over there means that the guest is alright". But it is, of course, only because they can use the arrangement of the furniture in this way that gives any meaning to the various configurations.

There are also so-called signs of nature. We say: "A red sky at evening means that tomorrow will be fair". But here, "means that" clearly has the force of "is associated with", and perhaps even has causal connotations. Such locutions are not of the proper form to be included within the intentional since they are disguised universal conditionals.[48] Further, such expressions as "x caused y" or "x will cause y" are not intentional since the existence of the ref-

erent of the second term is entailed. And, again, the general form: "x causes y" is a disguised universal conditional.

Another class of troublesome expressions is that the members of which involve the normative or evaluative such as (1) "x is right" or (2) "x is obligatory", and also (3) "x has the obligation to do y" or (4) "x should do y". Prima facie, the form of (1) and (2) is simply Fx; that is, rightness or obligatoriness is predicated of, respectively, actions or states of affairs and actions. Similarly, the apparent form of (3) and (4) is xRy. I see no compelling reason to doubt that these forms are essentially correct representations of the relations of the concepts involved. If so, (1) and (2) are not intentional. Although saying "x is right" does not entail either the existence or non-existence of x, the fact that its form is Fx restricts the grounds for ascribing intentionality to it. As our clause (5) demands that Fx entail that some intentional relation hold between x and some proposition, and since "x is right" does not lead to any such entailments, "x is right" is not intentional. This is as well, since I do not see any obvious link to the psychological in such statements; in fact, they are made in such a way as to avoid such links and give the appearance, at least, of simple objectivity.

However, (3) and (4) are intentional since they relate things to an agent, who must have some beliefs, knowledge, awareness, etc. to have the obligations ascribed to him. One might then wonder in what sense are they psychological. While it is true that they do not involve what might be called mental states the very implications which they enjoin reveal in what way they are "mentalistic".

The basic, rigid intentional expressions are not likely to lead

to much trouble; the major trouble makers of that group have been dealt with. What of the derived expressions? We have just looked at the normative, but what of this problem: take any proposition at all, say, "2 is a prime number" and this will entail such disjunctive propositions as "2 is a prime number or 2 is in pain". (This does depend upon one's view of "entailment" -- there are some who would deny this entailment, but I will take a "simple-minded" view to let the objection get off the ground.) This disjunction is clearly not intentional; does it have anything to do with the psychological? Only in the sense that the psychological expression "pain" (also intentional) occurs within it.[49]

If all has gone well, the arguments of this chapter have made plausible the contention that most of the basic intentional expressions are psychological. An objection that harks back to the dichotomies of usage that plagued me throughout this chapter could be made about the derived, flexible expressions. As was remarked earlier, one could solve this problem by noting that English simply has a shortage of words -- which deficiency could be rectified through the use of appropriate subscripts. But I dislike this approach. It is better to face the fact that some of the intentional expressions are not psychological. In most cases involving the flexible expressions it can be shown that the primary use is psychological. As an example, suppose there is a "turtle race" and T wins. It one asked the owner of T how T could win a race he didn't know he was in there is only one probable reply (unless the owner thinks rather highly, and eccentrically, of T and ascribes knowledge and the like to him). This reply would be: "You are right. T only 'won' the race because he was the first

turtle over the finish line. But it is only pedantry that would stop one from using (that eminently suitable word) 'wins'". It is only pedantry but it serves to reveal an important point: you cannot win a race unless you know that you are in it. The need for certain external conditions to be filled before a term is applicable which many of the derived flexible expressions share makes it easy to apply them when the external conditions necessary for their application and nothing else are met. However, I do not wish to claim that in every case the primary use of a flexible derived expression is psychological, though this may be true. I will instead try to show that the dichotomies unearthed throughout this chapter are not as important as they might seem.

The above criteria pick out a set of predicative expressions. At the end of the first chapter I criticized earlier methods of defining the intentional for failing to come to grips with the fact that we (a language using community) use intentional expressions to characterize entities. My formulation has, at least, presented us with a set of expressions which, though incomplete, is very well suited to that task.

Thus, let me define an Intentional Characterization of an entity to be a single attribution of a of a predicate to that entity through the use of an intentional expression. Thus "x is asleep" is an Intentional Characterization of x. "x loves y" is an Intentional Characterization of x, as lover, but not of y ("being loved" is not intentional). The use of these expressions will be examined in the following.

Chapter Three: Mental Features

Both Brentano's "ontological" approach and the "linguistic" approach of Chisholm and other contemporary philosophers has failed to complete the task set by Brentano, the task of completely demarcating the mental from the physical. Brentano attempted to find a distinguishing mark of the mental through direct examination of mental phenomena; he wished to find some special property that all and only mental entities shared. Chisholm hoped to demarcate the mental through defining a certain class of sentences that were supposed to be "about" the mental, or, construed broadly, the psychological. The linguistic approach offered more scope for philosophical analysis, thus leading to an outpouring of work based on this method -- but the problem remains unsolved.

Nonetheless, this approach does let us attain a clearer view of what it is to be psychological. The class of intentional expressions defined in the last chapter can be employed to effect a kind of solution to Brentano's problem which will bring out much of interest about our mental concepts.

Mental features are exemplified. And they are exemplified by minds, or en-minded entities. If one could find a "mark" of en-mindedness, that would, in a way, offer a demarcation of the mental from the physical. It would be such a demarcation in that what is mental these entities exemplified. Of course, such entities also exemplify non-psychological features, but these features will not be designated by intentional expressions. Thus a formulation of a solution to Brentano's problem might be like this:

(1) O is a mental feature if and only if O is exemplified intentionally by an en-minded entity.

Several difficulties are immediately apparent. First, from the outline of intentionality already given it is clear that the range of the "mental features" will be quite large. That is, such things as "x's winning of the race" and "x's being obliged to do something" will count as mental features of x. The use of the word "feature" instead of, for example, "state" will hopefully remind the reader of the extensiveness of this notion. And the notion is germane here for each mental feature is inextricably linked with the psychological states through their application to individual entities.

Secondly, "en-mindeded" occurs on the wrong side of the above definition. That is, to be a proper definition of the mental a completely non-psychological explanation of "en-mindedness" must be given; it is this task which will form the main body of the present chapter.

Third, and of lesser importance, the notion of "exemplify intentionally" should be made clear. This difficulty, at least, is readily solved. To say that O is exemplified intentionally is to say that O is attributed to an entity through the use of an intentional expression, as defined in Chapter Two. Thus the features I am concerned with are predicable in nature; I take it to be true that whatever is mental is a predicable feature of an entity. Perhaps that entity may be simply a "pure mind" but it is an entity nonetheless. A putative mental feature might be reported by the words "is thinking", and to fix the sort of "thinking" under consideration here we might add

"of Vienna". Now, if we grant that this rock is an en-minded entity then "this rock is thinking of Vienna" is an example of an en-minded entity exemplifying intentionally the feature caught by "is thinking of Vienna". This should make the notion of "exemplifying intentionally" clear but the example leads directly to the second problem mentioned above, how to decide which creatures are en-minded without circular recourse to mentalistic features? I believe that there is a way to do this, in terms of the Intentional Characterizations defined at the close of the last chapter. I propose to show a kind of equivalence between the use of intentional expressions to characterize entities and the ascription of mind to those entities.

Perhaps I reveal a prejudice here. What has the ascription of mind got to do with having a mind? This is a good, and large, question. While I am inclined to answer "everything", I need not so answer. In fact, I need not make any answer. I am only arguing that the mental features of the world can be marked out by considering those entities to which we ascribe minds. If other entities have minds then they will exemplify these features (or some of them) as well, even if we do not know it. For example, some entities exemplify compassion and some don't. But an en-minded creature that is aware of suffering but which fails to exemplify some degree of compassion towards that suffering either exemplifies a contrary, like cruelty, or is indifferent to that suffering. A tree, if it granted that trees do not have minds, does not even exemplify this sort of indifference (though I suppose that this is the intentional characteristic we can most easily imagine tagging a tree with). It would be ludicrous for one of my culture to upbraid a tree for displaying a callous indifference to

the plight of, say, the Italian earthquake victims; for trees do not display anything on the mental continuum to us. But any creatures who are clearly en-minded do. If any members of an alien race visit the Earth and speak with us, yet seem affected by the suffering of others rather as a tree is, then they will be rightly judged or deemed indifferent to suffering. One wants to say that they would be charged with indifference. (We might explain their indifference in terms of cultural or genetic factors, but indifference it would remain.) I claim that the creatures of this world called humans or persons exemplify such a wide range of mental features that any other en-minded creature would share some (and, in fact, a great many) of these mental features.

Before attempting the proof of the above equivalence some further conceptual machinery is required. At the close of the second chapter an Intentional Characterization of an entity was defined as the single attribution of an intentional predicate, through the use of an intentional expression, to that entity. Let me now define the notion of an Intentional Depiction of an entity. Roughly, the idea is that an Intentional Depiction of an entity is just the use of a wide range of the Intentional Characterizations over that entity. Probably, there is no way to make the notion completely precise -- it is admittedly vague. But the notion of "en-mindedness" is also vague, so the idea of an Intentional Depiction may be just the thing we need to give an account of en-mindedness. To tighten it up just a bit we might try this: an entity, x, is Intentionally Depicted if and only if more than n Intentional Characterizations of x are used either by x himself (in referring, that is, to himself) or by others around him

over some period of time, t. But it is quite likely correct to say that this is not entirely satisfactory on the grounds that some entities will not receive a sufficient number of Intentional Characterizations and yet are such that we would ascribe a mind to them. However, I hope to show that if we were to ascribe a mind to an entity then we would Intentionally Depict that entity.

An important point is raised here. One must distinguish between simply not characterizing an entity in a particular way and an active denial that it has such a character. It is conceivable that one might say of something, x, that x has a mind and yet refuse to say anything else at all about x. This would, in a sense, be the ascribing of a mind to x withough the making of an Intentional Depiction of x. But there is surely something odd about this case. In such a situation the ascription of mind is barren; what should be of importance to us is the force of this ascription in significantly descriptive contexts. That is, if we are attempting to describe an entity in a fairly wide ranging way, what does the ascription of mind add to that description? The claim is that it adds roughly what is contained in an Intentional Depiction. So the limits of this discussion will be the limits of significantly descriptive discourse, that is, those situations in which people want to say things of an entity and in so saying capture a large or important segment of that entity's "essence". Perhaps reference to an artificial situation would help to clarify this point. Imagine that we form a weekly discussion group. The purpose of the discussion on any particular occasion is to offer as complete a description of a certain (pre-selected) entity as possible. Then the equivalence claim could be couched so: our discussion group ascribes

a mind to x if and only if our discussion group Intentionally Depicts x. Now I would claim that such a group activity adequately outlines an important aspect of language use. It is clearly vital to have adequately complete descriptions of various entities, although obvious pragmatic considerations will restrict the class of entities, and as well the scope of an adequate description; nevertheless, in a sophisticated community the descriptions will be quite far reaching. The discussion group model effectively idealizes one activity that the linguistic community undertakes. In the actual situation any particular entity is likely to be descriptively considered only at random intervals of varying duration, yet these intervals together make up something like our discussion group. So let the equivalence to be proved be this: in contexts of significantly descriptive discourse, an entity, x, is ascribed a mind if and only if x is Intentionally Depicted.

To show the equivalence, of course, implications in both directions must be shown. Let us first suppose that we, who form the social and linguistic community ascribe a mind to some entity, call it x, but suppose, if only for purposes of a reductio argument, that we do not Intentionally Depict x. That is, in attempting to describe x effectively we do not use any, or at most very few Intentional Characterizations of x. There is an incoherence lurking here. To have a mind is to undergo psychological episodes. In individual cases the Intentional Characterizations do not necessarily designate psychological episodes, but in Intentionally Depicting an entity we do assign a great number of such episodes to that entity. Thus in effectively describing an en-minded creature (that it is en-minded is given by

hypothesis) psychological episodes must be employed. This requires the Intentional Depiction of that entity.

Try to imagine an entity possessing a mind but to which hardly any mental episodes can be ascribed. Apparently, it has virtually no beliefs, hopes, fears or desires; no mental images, sensations or emotions. What would be the force of saying that it nonetheless has a mind? There might be a consideration of a kind of capacity or potential to undergo mental episodes that would help us to imagine such a case. For example, a man in deep sleep could surely be said to have a mind, but is an Intentional Depiction of him therefore necessary? Yes, to a normal man in deep sleep we still give innumerable Intentional Characterizations: he remains sane, he remembers a great deal, he is the master of at least one language, he is still claustrophobic and a mediocre mathematician. It would be absurd to hold that in sleep all beliefs, skills and desires flee. What about a man who, due to extensive brain damage, is in a vegetative coma? Surely here it is plausible to say that the mental episodes have fled. In this case, one must first ask: "Does such a man have a mind?" This amounts to the question, could a mind be completely dormant? One thing is sure -- if a mind was completely dormant for its entire history, then we would not ascribe a mind to the entity possessing it. For we would have no grounds for doing so. Now, is it not the case that if we ascribe a mind to a man in such a coma it is in somewhat of a parasitical way, something of a courteous bow in the direction of his "person-hood"? He did have a mind, and could again if only the surgeons could heal his brain and he would awaken. And so we might say that his mind remains, even if it is empty, throughout the

period of his unconsciousness. The force of our saying that he has a mind during his coma need be little more than this: if he were to awaken we would resume our Intentional Depiction of him. His lack of consciousness is very different from the unconsciousness of, say, a rock in this respect at least. In the case of such a coma there is only a hiatus in the Intentional Depiction. But as we are interested in describing the complete entity, as it were, it is the former applicabiblity and the chance of future applicability of the Intentional Depiction that leads us to grant him a mind throughout his coma.

Alternatively, we might well deny that he has a mind at all during his coma. This more or less amounts to narrowing our focus to just the hiatus mentioned above. We place more weight on the immediate inapplicability of the Intentional Depiction of him than on the overall history of appropriateness of this sort of description. In both cases one sees an intimate connection between the ascription of mind and the Intentional Depictions.

There are also, it must be admitted, problems concerning the inherent vagueness of the notion of mind. What if entities resembling humans in such comas were (somehow) common? We might prefer to say: "We just don't know whether to ascribe minds to them or not". The similarity to humans would likely tempt us, on the one hand, to grant them minds. The seeming inappropriateness of an Intentional Depiction of them would, on the other hand, dispose us to deny that they have minds. This last sentence is almost equivalent to the implication I seek to establish, except that we have "disposes" instead of something stronger. Perhaps the vagueness of "mind" will only permit such pseudo-probabilistic statements; if so, so be it. I can-

not deny that, prima facie, many features besides those involved in an Intentional Depiction could lead us to ascribe a mind to a certain entity. This may seem to leave us with en-minded creatures that are not Intentionally Depicted. But I would first look more closely at these features. One such is similarity to human beings, that is, active, Intentionally Depicted human beings. Immediately one sees that the significance of this is similarity to Intentionally Depicted entities, a prominent class of which is the class of humans. It is likely that all the features that might lead us to ascribe a mind to an entity of which an Intentional Depiction is inappropriate are features that will establish the similarity of the entity in question to an Intentionally Depicted entity. Again, a strong conceptual connection between Intentional Depictions and the ascription of mind emerges.

All in all, I believe that because of points like the above, the reason we might ascribe a mind to a person in such a coma is something like this: (a) Active people have minds. (b) We do not, really, know what minds are. (c) Therefore, there might be dormant minds. (d) If there are dormant minds then surely people in comas have them (a "paradigm case"). (e) Therefore, people in comas might have dormant minds. If we must come down on one side, let us say that they do, for they are, after all, still people[50]. It would be wrong, however, to ignore the temptations that pull us towards the other side of this issue. Some might say that people in such comas just do not have minds, they have become "vegetables", because such "sub-persons" do not appear to offer any behavioral or even physiological grounds for saying that they undergo mental episodes in their present state.

Thus my verdict on the supposed counter-example is this: the

vagueness of our notion of mind leaves many questions unanswerable without the clarification of this concept.[51] This clarification is certainly controversial, but there are only two ways to go in this case. We may hold that (i) people in comas do not have minds and in this event, of course, there is no counter-example, or (ii) people in comas do have (dormant) minds. But what leads anyone to say that (ii) is better? The principle of emphasizing the similarity of active humans to humans in comas. It is by a kind of courtesy that they have minds ascribed to them since they do not behave in ways meriting an Intentional Depiction, and nor do their physiological processes (what can be called "covert behavior") give any ground for supposing that an Intentional Depiction is appropriate. They are, then, outside the contexts of significant description outlined above. Nothing follows from their being said to have minds. Such talk would not offend a bizarre speaker who both eschewed all intentional discourse about an organism and nonetheless affirmed that the organism had a mind; we have met such a speaker before and seen that he is not interested in effective description. It is not as if we had found out something about minds, found out, say, that they can be strongly dormant. We have only decided to say that they can be so dormant. That this stipulation results from the application of the similarity principle can be seen by further considering talk of dormant minds. Clearly, anything can possess such a mind without our knowing it, my pen and, indeed, this period: . I could opt to say that my pen has a dormant mind, but if I did so I hope that the similarity of my position and the position of the above bald "affirmer of mind and nothing else" is obvious. Approach (ii) is something of a way to avoid

"writing off" people with extensive brain damage who lie in comas. It would seem cruel to say that they are no longer people. Yet an apparently essential property of a person is that of "having a mind". So, in short, my reply is that the counter-example fails because it removes the object of the counter-example too far from the realm of significantly descriptive discourse.

Actually, I think the foregoing has strengthened the case for the putative implication; it seems there is a definite link between describing an entity as having a mind and, as it were, going on to describe it in terms of Intentional Characterizations (i.e. to give an Intentional Depiction of it). If in seriously attempting to describe an entity, we ascribed a mind to it yet then denied that it felt anything, believed, knew, wished for anything, what would we have said about that entity in ascribing a mind to it? Nothing, except, perhaps, that we count it as <u>with us</u> in some sense; our efforts would have been merely a charade of a description and nothing more. In discussions about the morality of abortion one question often debated is: when does the fetus come to have a mind? This question might well be reformulated as: when does the fetus begin to feel things, be aware of things, and so on. The debaters have explicitly entered the context of significant description and both sides agree that if they ascribe a mind to the fetus then they shall properly give an Intentional Depiction of it.

To ascribe a mind to an entity while refusing to Intentionally Depict it, then, is tantamount to endorsing a sort of incoherence. It is too much like either (1) saying that x is an automobile but has no chassis, transmission, body, engine, etc. or (2) saying that x is a

a baseball game but has no one playing it, is not played on a "diamond", will have no winner, etc.

What about the other direction? Suppose we give an Intentional Depiction of x yet carefully refrain from ascribing a mind to x. Of course, there are many entities of which we give Intentional Characterizations but to which we are unwilling to ascribe minds. We may say, of some obstreprous piece of machinery: "it wants to get me". Or, in describing the performance of a new guided missile we may say: "it seeks its target". But we will not go so far as to give an Intentional Depiction of these entities. The Intentional Characterizations are being used metaphorically in order to stress that aspect of the entity's behavior which strikes us as being interestingly similar to a behavior pattern of an en-minded creature, probably a human being. But we are not liable to go on multiplying the Intentional Characterizations used in regard to these entities. To do so would offend our sensibilities. For example, in the case of an Intentionally Depicted entity, say a human being, if we say that it seeks its target it would be natural to make the further claim that "it wants to get to its target"; in the case of the missile, though, no such move is possible. The metaphorical use of rigid intentional expressions is very common. This does show something about the usefulness of the intentional mode of discourse, but it also reveals a strong animistic bent in our cultural inheritance. This restriction on the use of intentional expressions holds as well for the flexible expressions. That which is characterized by a flexible expression in its non-intentional mode will be so characterized by only a very few such expressions. In both cases, the most important thing

is that we will refrain from giving an Intentional Depiction of the entities in question. We refrain because we are loath to admit that these creatures enter into the broad spectrum of mental features. We refuse to ascribe minds to them, yet how could we honestly refuse them minds if we used a large number of Intentional Characterizations to describe them, that is, if we gave them an Intentional Depiction.

Consider a mythical tribe, not too unlike the tribe in Sellars' "Myth of Our Rylean Ancestors"[52], who at some time do not possess the linguistic equipment to make Intentional Characterizations of the entities around them. Let us suppose that their language grows in sophistication; they begin to use such expressions -- that even we, perhaps, would say are only marginally psychological -- as "seeks", "sees", "listens", etc. Of course, they usually apply these expressions to other members of their tribe, but suppose that this particular tribe also used them in speaking about animals and even trees, rocks, rivers, mountains and thunder-storms. Perhaps we might surmise that they had been overly impressed by the seeming power of explanation an expression such as "seeks" gives one and thus applied it to everything that behaved in <u>any</u> way like a human being. With the continual influx of new intentional terms these explanations become more and more complex, yet the tribe still applies them to most of the major entities about them. At some stage they begin to use expressions like: "desires", "wants", "loves", "fears" and in their ordinary discourse will occur such utterances as: "the river loves us". The river, they say, is so kind as to flood every year and bring new soil. This is really not so foolish as it might seem, for given that the river is to be included among the intentionally characterizable,

what else could it do to show love. Now a brilliant, speculative man emerges in their history and makes the bold theoretical leap of initiating "minds" into the tribe's ontology. Finally, the tribesmen "realize" what ghosts are, and what dreams are: the mind or spirit leaving the unconscious body during sleep, explaining both why a sleeping man does not seem to merit an Intentional Depiction and also how someone can have experiences of the most varied sort while he is apparently lying motionless on his mat. But the tribe cannot refrain from granting that thunder-storms and the river also have minds since they have predicated of them exactly the same sorts of experiences that they have predicated of themselves. And by now such experiences are, for the most part, covered by the intentional expressions. With the introduction of "mind" the explanatory system which opened with the Intentional Characterizations is, as it were, completed. There is now, that is, a reason why people and rivers and thunder-storms are different, different in that they merit Intentional Depictions, from such dull entities as the flint chips used to make arrowheads and the like. It is certainly true that if they give an Intentional Depiction of an entity then they will ascribe a mind to that entity.

It might be objected that our present mentalistic discourse is not primarily an explanatory device. This seems just wrong to me. Consider this experiment in which several persons were instructed to describe the behavior of some pigeons:

> "Their responses included the following: (1) The organism was conditioned to expect reinforcement for the right kind of behavior. (2) The pigeon walked around, hoping that something would bring the food back. (3) The pigeon observed that a certain behavior seemed to produce a particular result. (4) The pigeon felt that food would be given it because of its action; and (5) The bird came to associate his action with the click of the food-dispenser."[53]

Surely the attractiveness of this way of describing the movements of a pigeon is that the intentional expressions serve to explain these movements. The use of mentalistic discourse is not always, it is true, the use of an explanatory system, but if one just listens to a typical speaker who employs these expressions one will find that in a large number of cases they are straightforwardly used to explain behavior. This mode of discourse is not, of course, the fruit of a fully fledged scientific theory, but neither is the "theory" to which my mythical tribe subscribes. The relation of mentalistic discourse to the discourse of a "genuine" scientific theory is unclear. There are those who hold that there is no essential difference. On the other hand, no matter which view of this problem is correct, the fact remains that we use intentional expressions, to a large degree, to explain the behavior of various entities. The attempt to determine motives in a law-court is just a particularly obvious example.

Roughly speaking, what the tribe has been engaged in is the attempt to understand nature; although, of course, they seek to survive as well as understand the two endeavors cannot be rigidly separated. The introduction of the intentional expressions would seem like a sudden leap in understanding. Human actions seem more fully intelligible when we may say: "He goes to the river in the morning because he hopes to see deer." The same is true of animals' actions when we say: "The deer run away because they are afraid." And, abstractly considered, the same advantages can accrue even in discussing events of nature: "Thunder-storms occur when the sky becomes angry." This mode of discourse offers a whole new way to characterize nature as an intelligible system.

Next, let me complete the myth. As time passes the tribe increases

its store of knowledge. Suppose that at some point the tribe discovers that the river's floodings and subsidings are determined completely by the melting of the snow about the headwaters. The terrible realization comes to them that the river is nothing but water running in a natural channel. This gradually affects them until they reach the point where they feel silly in ascribing a mind to the river. If so, they will feel just as silly in saying that, of the river for example, it loves them. Of course, it is possible that, even if they do make the above discovery, they will continue to ascribe a mind to, and Intentionally Depict, the river.

The tribe of my myth is not so very different from my own linguistic community. However, if one uses analogies to support a point it is best to have more than one. Let me produce another story, in a (perhaps) mythical future. Here I am indebted to ideas in two papers, one by Hilary Putnam[54] and the other by Keith Gunderson[55]. In these papers certain aspects of mentality, which some writers have taken to be uniquely mentalistic (such as "privacy" and, in Brentano's terminology "immediate self-evidence"), arise in certain kinds of machines, notably those which can "refer" to their own states (here we must take "refer" in a neutral sense, in the same way as we have taken "behaves" throughout). Let us extend the capacities of these machines. First, let them be able to speak, that is, not to beg any questions, let them be able to generate sounds which would be taken to be genuine utterances and which, if so taken, lead to felicitous interaction between man and machine. The difference between Intentional Characterizations and Intentional Depictions should be noted again here. There is no doubt that we would say of such machines that

they mean such-and-such, but, as with the missile example, this could be explained in terms of metaphor -- a metaphor, though, for which there is no convenient literal translation. If it is a metaphorical use we would not go on and give an Intentional Depiction of these machines. Already some machines are Intentionally Characterized by some people, especially those working with computers, but they are usually quick to disclaim anything but a convenient way of talking about their devices -- that is, they refuse to depict them intentionally.

But the machines I wish to introduce in my story are so well programmed for "understanding" people, and are so "linguistically sophisticated" that the interactions between them and men and women are all pervasive; one can ask these machines for advice, one could not go through a normal day without speaking to several of them, and so on. They are also far too complex for any human to understand. (This feature, at least, is already matched by present day computers; when one is designed -- with extensive computer assistance -- there is no way short of running it to see if it will operate as intended.) Next I ask my readers to suppose that the originally metaphorical use of Intentional Characterizations of these machines becomes ever more extensive until at last it comes to be that they are given a full-blown Intentional Depiction. That is, they are said to know such-and-such, to hope for this or that, to wonder about their future. Suppose they are even said to have sensations, that they are sometimes said to be in pain. I assume that there are automatic circuits that "report" damage to the machine itself. Right here let me make a point of Gunderson and Putnam that the machine then has private access, in the philosophical sense, to its pains. If a machine says that it is in

pain, then it is, since it will not say this unless its "damage reporting circuit" is in operation. In such a case it would not matter, of course, whether or not there was any actual damage.[56] On this account no one else has the same sort of access to the computer's pains as it has itself, since anyone else can only observe the operation of its circuits to determine whether or not it is in pain. In short, they are depicted pretty much as humans are; there may be some differences: perhaps they are not subject to various passions like rage or lust. The question is, then, given that we do give Intentional Depictions of them, can we nonetheless deny that they have minds? It seems clear that we have no intellectual right to do this. Of course, as we noted before, we may abdicate our descriptive responsibilities and simply and staunchly affirm that they do not. But in fact, we have just as much reason to suppose that they have minds as we have to suppose that humans do. These reasons are not simply that we give Intentional Depictions of them. There are also such considerations as the complexity of their behavior, and their physical complexity which is approximately equal to that of humans. But it remains that if we give Intentional Depictions of them then we ascribe minds to them.

As further evidence for the equivalence of the ascription of mind and the giving of an Intentional Depiction let me note some quasi-empirical considerations. First, if the equivalence does hold then with a growing reluctance to ascribe a mind to a particular entity (or the members of a species) should go a concomitant reluctance to give an Intentional Depiction of that entity. This is observed to occur. As studies of primitive life-forms result in fairly detailed "mechanical" explanations of their behavior we are increasingly reti-

cent about ascribing minds to them. This reluctance actually manifests itself as the reluctance to continue to give Intentional Depictions of these entities. As we saw in the quote from Skinner, certain Intentional Characterizations are very natural indeed, and almost compel us to employ them in describing certain sorts of behavior. But if one denies that a pigeon, for example, has a mind then one must obviously replace the Intentional Characterizations used before this denial. Second, with the growth in complexity of computing machines the number of Intentional Characterizations of these machines is growing rapidly. Because of the increasing naturalness of using such expressions, and also because of the lack of a complete understanding[57] of some of these machine's workings there is less opposition to the idea that a machine might have a mind.

Yet another ground for this intimate connection can be perceived through noting that both "mind" and the various expressions making up the Intentional Depictions serve the same dual roles. These words are "honorific as well as descriptive"[58] as Abelson says. They play an evaluative role as well as a straightforward predicative one. Now, if we honor an entity with the ascription of a mind, it is then a pointless discourtesy to withold the various mentalistic predicates that normally go along with it: "consciousness", "thinking", "believing", etc. And if we withold the ascription of mind, the witholding would be utterly senseless if we then went on to predicate things like "consciousness" of it.

Once we accept the equivalence the definition of "en-minded entity" which was sought for earlier becomes available. (2) An entity, x, is an en-minded entity if and only if x would be given an Intentional Depiction in contexts of significantly descriptive discourse.

Consider an expression predicated of humans, "lawfully hangs". As we saw in Chapter Two, this is an intentional expression, and what is more, a rigid derived one. Thus when a human lawfully hangs someone he exemplifies the (relational) feature "lawfully hangs" intentionally. Recall the proposed definition of a mental feature: (1) O is a mental feature if and only if O is exemplified intentionally by an en-minded entity. Thus on this definition "lawfully hangs" is a mental feature. And it certainly is. Admittedly, it is not what might be called a mental state of someone, but it is inextricably tied to the psychological and could not be properly explicated without bringing in a great number of other psychological (and intentional) expressions. In a survey of the mental such things should be considered, and I hope that the term "feature" will not offend anyone. Here, finally, I can return to the difficulties stemming from the alethic modalities. It can now be seen that they arose because of the mistaken notion that intentionality, and just intentionality, would serve to mark out the mental. The expression "makes it likely that" is intentional, but it will not be exemplified intentionally by any en-minded entity and hence it is not a mental feature. (In a case where we say: "Jones makes it likely that the meeting will be cancelled" this is elliptical for "Jones' actions (or attitudes, etc.) make it likely that the meeting will be cancelled" and "actions" are not en-minded entities.) In addition to the rigid intentional expressions there are also the flexible ones, such as "wins". On one use "wins" is not intentional, but on that use it does not seem to be literally applied. If we predicate "wins" of a human we intend it in the intentional sense. That is, if I say "That man, Fitipaldi, won the Mexican Grand

Prix" I imply that Fitipaldi knew that he was in the race. So this feature is exemplified intentionally by an en-minded entity (Fitipaldi) and hence is a mental feature. This does imply, though, that on my view when a flexible expression is used non-intentionally there is a sense in which the psychological enters. But this sense is only that, since each flexible expression has at least one use which is intentional, such expressions are suggestive of the psychological. It is for this reason that the subscript solution was rejected.

I hoped to emphasize in this chapter that the mentalistic expressions in our language are used as a means of characterizing a certain class of objects. These expression can be almost completely marked out by a set of linguistic criteria, but, in fact, it is the systematic use of them that truly demarcates the mentalistic from the non-mentalistic expressions. By showing the importance of the Intentional Depictions in relation to our notion of en-mindedness I hope to have explained the suggestivity or metaphorical "push" which involves the flexible expressions with the psychological. This suggestivity reveals why we employ mentalistic expressions in what would appear to be inappropriate circumstances.

By bringing out the intimate connection between the Intentional Depictions and the ascription of mind I hoped as well to illustrate the vastness of the set of expressions involving the psychological. This end necessitated the "open" implicative clauses in my criteria of the intentional. The vastness of this class raises another issue, which I can only touch on but which may serve as an effective conclusion.

Concluding Note

Recall TI-1, the thesis that, roughly, intentionality marks out the mental. What has gone before is, in a way, a lengthy consideration of TI-1. But there is another thesis of intentionality worth noting. Let me call it, naturally enough, TI-2, and add that TI-2 must be carefully distinguished from TI-1. It is stated thus by Jaegwon Kim (under the title of "The Brentano-Chisholm Thesis"): "(1) Every physical phenomenon is describable by a non-intentional sentence. (2) No mental phenomenon involving psychological attitudes such as wanting, believing, and knowing can be described by a non-intentional sentence."[59] As Kim notes, "... a full criterion of the mental cannot be extracted from this thesis ..."[60]. But our investigation suggests that such a criterion is, in fact, available. In any event, TI-2, if true, does seem to have the consequence that mental phenomena are not physical phenomena. While I do not have nearly enough space to consider the truth or falsity of TI-2, its importance and relation to TI-1 demands that I examine some of the issues it raises.

These issues are notable both for their complexity and their controversial natures. The problem lies at the intersection of several hotly debated philosophical questions.

Clearly an Intentional Depiction of an entity offers a way to describe that entity, but there are other ways. One could, for example, describe the entity in terms of purely physical properties to any level of precision, down to the level of the constituent atoms or beyond. And this incites one to ask: "What is a <u>complete</u>, or <u>adequate</u>, or <u>effective</u> description of an entity?", "What makes one descrip-

tion better than another?", "Can there be more than one complete description of an entity?". Suppose that science had advanced to a state where, from the initial position of any body, the intial constituents of the body and the forces operating on the body, the future positions and movements of the body could be completely determined. There are arguments to the effect that, at that point, science has succeeded in providing a complete description of bodies. Are we to take TI-2 as saying that is is impossible, in principle, for science to reach this state of "perfection"? Needless to say, that is a rather rash position. Or could we interpret TI-2 as meaning that even if science does become this powerful the description of humans and of en-minded creatures in general in these scientific terms will, nonetheless, be somehow inadequate? The second disjunct seems more tenable, but the question then arises: "What do the intentional expressions add to the scientific description?" Clearly they do not add any explanatory power since, ex hypothesi, science can completely predict anyone's actions. Of course, one might argue that explanation is not the end-all and be-all of human activity. Even if science does attain complete predictive power, if it does not mention the normative aspects of the world then it will have failed to provide a complete description of the world. Similarly, if science fails to note "pains", "beliefs", etc. then the description will be lacking even if all the predictive power one could want is available. However, it is an open question whether science can account for the normative, perhaps through some sort of reductionist stance. Problems of both ethics and ontology enter here that I can only mention.

These problems tie in with the issues raised by the question: "Why do we Intentionally Depict certain entities?" One answer to this

is surely "to explain those entities' actions", but this answer is not totally perspicuous. For one thing, there are difficulties here in separating causes from effects in that there seems to be a logical link between, for example, the unfrustrated intention to open the door and the opening of the door.[61] Even if we set this point aside there is the obvious fact that when I intentionally depict an entity I am imagining that entity to be like me in various ways. "We project ourselves even into what from his behavior we imagine a mouse's state of mind to have been ... such is our dramatic virtuosity."[62] What right have I to so project myself? Do I have this right only in the case of humans? If so, is this due to their outward (and inward) similarity to me? Or do I have this right in the case of all speaking creatures? The answers to these questions are far from clear. In a way, if seems possible that I could refuse to ascribe intentional characteristics to anything (except, perhaps, myself). But problems arise even here. Would the expressions I use in place of the Intentional Characterizations really be anything but new words? For what if I could replace "pain" in my speech by "firing of C-fibres"; would that really amount to anything? Or would it be like the case of trivially replacing "pain" by the neologism "schpain" and going on as before? Also, even if it was possible for me to regard all those about me as "automata", could I so regard myself? Surely in my own case the replacing of "pain" by "firing of C-fibres" would be a trivial, purely verbal action. First one is drawn one way on these issues and then the other, and no solutions are at hand.

Related to the question of what makes up a complete description is this question: "What is the relation of ordinary discourse to

scientific discourse?" Is ordinary, everyday talk merely an imprecise, non-mathematical species of a genus to be hailed as scientific discourse? If this is so, and science can explain human action in purely "mechanical" terms, then that sort of talk should replace our ordinary intentional descourse, for "mechanical" explanation would undoubtedly by an improvement, as far as prediction went, over ordinary speech. Some people do hold this view. I suspect that Paul Feyerabend does. And Dennett says, quite forthrightly: "The personal story moreover, has a relatively vulnerable and impermanent place in our conceptual scheme, and could in principle be rendered 'obsolete' if some day we ceased to treat anything ... as an Intentional system."[63] Of course, this begs a quesion, namely: "Does science provide the complete description of the world?" And this question brings us back, in a grand circle, to the questions asked at the beginning of this section.

If TI-2 is true, it has profound implications for this, a blatantly, if only intellectually, physicalistic age. But whether TI-2 is true or not cannot be seen without the solution to a host of monumental philosophical difficulties.

Whatever the truth-value of TI-2, I hope to have shown that TI-1 is true, that there is a set of demarcable expressions that "pick out" the mental features of the world. I also hoped to show that the mental features form a vast cluster of predicates with complex logical relations among them, and that our notion of "en-mindedness" stems from the literal use of the intentional to characterize the entities around us.

Notes

1 Brentano, Franz. Psychology From the Empirical Standpoint.

2 I choose the word "impression" for stylistic reasons, and leave open the unpacking of this notion. It is incontestable that we make perceptual errors; and sometimes we are wont to say that someone has mistaken a mental entity for a physical one. (As in "those pink rats are only in his mind".)

3 Brentano. P. 127. (Page references for Brentano are for Morick -- see bibliography.)

4 Brentano. P. 127.

5 Brentano. P. 122.

6 Rorty, R. "Incorrigibility as the Mark of the Mental". Rorty deals with this problem in terms of a stretching of our concept of the mental from "... the paradigm cases of the nonphysical -- thoughts and sensations -- to such things as beliefs, desires, emotions and intentions" (P. 420). But this is hardly to solve the problem -- a stretched concept is a concept for all of that. beliefs, desires, etc. are mental and, as Rorty has to admit, they are not incorrigible.

7 Brentano. P. 122.

8 Here is the english version of the formula: if there is an x such that x is an element of the class of beliefs and x is an object of inner perception then for all x, if x is an element of the class of beliefs then x is a mental phenomenon.

9 Brentano. P. 126.

10 Brentano. P. 127.

11 Brentano. P. 119.

12 Brentano. P. 114.

13 Brentano develops a theory of "presentations" (vorstellung)but this obscure doctrine is of secondary importance -- what is important is the contention that "pains have objects".

14 Brentano. P. 121.

15 Chisholm, R. "Sentences About Believing". Pp. 32 - 34.

16 There is, as well, an intermediate position. Perhaps to see the P.M. is merely to have certain "visual impressions" and does not

involve any cognitive element at all (though here one could argue that to see anything is to see it as something or other). If so, "seeing" would be mental; however I can deal with this possibility in the same way as I propose to deal with sensations. (See below, Chapter Two.)

17 Campbell, Keith. Body and Mind. (See Chapter Six.)

18 Chisholm. "Notes on the Logic of Believing" and "On Some Psychological Concepts and the "Logic" of Intentionality".

19 "C" = the medieval term "in sensu composito".
"D" = the medieval term "in sensu diviso".
"U" and "E" correspond to the universal and existential quantifiers respectively.

20 Where "possibility" has the same sense as "◊" in S5 with all worlds restricted to one domain.

21 Sleigh, R.C. "Comments".

22 Chisholm. "Notes on the Logic of Believing". P. 83.

23 I should point out that here again the perceptual verbs offer something of a problem. There is not supposed to be an implication of ED from EC; thus it should not follow from "I see that something is black" that "There is something which I see to be black". Considering that the sense of "see" must remain constant, this seems somewhat counter-intuitive.

24 Sleigh. "Discussion".

25 Chisholm. "Brentano on Descriptive Psychology and the Intentional". P. 148.

26 Chisholm. "Brentano on Descriptive Psychology and the Intentional". P. 149.

27 This is to speak suggestively but somewhat sloppily. In fact, the complete reading is: for all x and y, if y=the next president then it is not the case that A prima facie indicates, if true, the probable non-existence of y. This sounds odd, but surely it is true that, though, for example, the Axiom of Choice is equivalent to the Well-Ordering Theorem, a sentence might prima facie indicate the truth of the Axiom of Choice without prima facie indicating the truth of the Well-Ordering Theorem.

28 Dennett, D.C. Content and Consciousness.

29 Plantinga, Alvin. The Nature of Necessity.

30 Lycan, W.G. "On 'Intentionality' and the Psychological".

31 Anscombe, G.E.M. "The Intentionality of Sensation: A Grammatical Feature".

32 Lycan. "On 'Intentionality' and the Psychological". P. 109.

33 Cornman, J.W. "Intentionality and Intensionality".

34 Chisholm. "Some Psychological Concepts and 'Logic' of Intentionality".

35 Brentano. P. 120.

36 Chisholm. "Brentano on Descriptive Psychology and the Intentional". P. 149.

37 Chisholm. "Brentano on Descriptive Psychology and the Intentional". P. 149.

38 The expression, R, must be "simple" in the sense that it contains no truth functional connectives. That is, "x is not identical to y" is to be considered, if at all, as "it is not the case that x is identical to y" wherein "is identical to" is the expression to be tested for intentionality. This tack avoids obvious problems and will not, so far as I know, lose us anything we might want to keep.

39 Dennett. Content and Consciousness. (See Chapter Two.)

40 O'Connor, D.J. "Tests for Intentionality".

41 For example, Hamlyn in The Theory of Knowledge (See Ch. 4, section (a)). Quinton in "Article on Knowledge and Belief" in the Encyclopedia of Philosophy. Unger in Ignorance: A Case for Skepticism. Lewis in An Analysis of Knowledge and Valuation.

42 For examples see: A.N. Whitehead, Symbolism: Its Meaning and Effect. Pp. 23 - 24.

43 Morick, H. "On the Indispensability of the Intentional." P. 128.

44 But what kind of absurdity would this be? See below (Ch. Three) about animism and the applicability of intentional expressions.

45 Morick. "On the Indispensability of the Intentional". P. 128.

46 "Awareness" has two uses -- an intentional and a non-intentional. As with other such "split" words the non-intentional sense is not psychological. It seems clear that one could not suffer unless one was aware in the intentional sense and this sense implies belief.

47 Let me take this opportunity to mention Wittgenstein's doctrine that no one knows when they are in pain. Wittgenstein's reasons for holding this have to do with considerations of the context of utterances. In regard to pains, the contexts of utterance of first person pain statements do not admit of the machinery of doubt, evidence, etc. and hence "knowing" is not applicable in these cases. This doctrine has the odd consequence that, while

I cannot know when I am in pain, others can. Whatever evidence can be found to favor this doctrine it is obviously counter-intuitive. If I do not know when I am in pain then why does a doctor ask me if I am? Imagine the case of an absolute ruler who made laws by uttering something of the form: "I know that the law is ...". Would such a situation lead us to suppose that he did not know what the laws were? On the contrary, he knows the law better than anyone else.

48 Of course, there are universal conditionals about the psychological. My view is that they are not intentional but that they are about the mental in that they contain intentional expressions. (See following note.)

49 By restricting myself to predicative expressions I avoid another problem raised by Jaegwon Kim in "Materialism and the Criteria of the Mental" (see bibliography). Kim warns against what he calls "closure conditions", which are just the kind of imlicational clause I have employed above (conditions (3), (4) and (5)). He notes that "there are no men" implies that "no man believes that there are unicorns" which is, of course, correct. But it has no direct bearing on the issue since "there are no men" is not of the proper form, for it does not contain a suitable predicative expression that is presumably intentional. "P & -P" implies that "Nixon believes in God" but it does so only trivially -- "P & -P" is also not of the correct form. By dealing with a certain sort of expression I beg off dealing with sentences.

50 See below (this chapter) concerning the evaluative nature of mentalistic terms.

51 Such an attempt at clarification may destroy the original concept if it is what Waismann called "open-textured". See F. Waismann, "Verifiability" and, as well, Quine's Word and Object, P. 128.

52 Sellars, W. "Empiricism and the Philosophy of Mind".

53 Skinner, B.F. "Behaviorism at Fifty".

54 Putnam, H. "The Mental Life of Some Machines" and "Minds and Machines".

55 Gunderson, K. "Asymmetries and Mind-Body Perplexities".

56 There is also the possibility of "verbal error" through some interference in the "speech circuits'" operation.

57 Of course, one might say that the ciruit d agrams constitute a complete explanation of the machine's actions, and this is, in a way, true. However, what is lacking is the understanding that would permit one to accurately predict what the machine would do in various circumstances. If one has ever played chess against a machine the "explanations" of its moves that seem most cogent

are not electrical/mechanical ones, but ones that speak in terms of "goals", "strategies", etc.

58 Abelson, R. "A Spade is a Spade, So Mind Your Language". P. 239.

59 Kim, J. "Materialism and the Criteria of the Mental". P. 326.

60 Kim. "Materialism and the Criteria of the Mental". P. 327.

61 See Dennett, Content and Consciousness, Ch. Two.

62 Quine, W.V.O. Word and Object. P. 219.

63 Dennett. Content and Consciousness. P. 190.

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Appendix

(a) Some remarks by Bruce Hunter.

According to criterion (1), normative ascriptions such as "S is justified in believing that Fido is black", "S is obliged to honor his parents", "S has a duty to honor his parents" and "S has a right not to honor his parents" are intentional characterizations. Perhaps such normative ascriptions are also intentional on conditions (4) and (5) also, by virtue of entailing that S has certain attitudes, sentiments, desires, purposes, needs and wants, although their intentionality by (4) and (5) is less clear.

On the first page of Ch.Three you say "O is a mental feature if and only if O is exemplified intentionally by an en-minded entity". We may assume that the obligation to honor one's parents, etc. is something which may belong only to en-minded creatures. In what sense, though, are obligations, duties, and rights <u>mental</u> features? They don't seem to be mental states (unconscious, sub-conscious, dispositional or activated) like beliefs, desires and sensations, although senses or feelings of duties may be.

The question is important given the model you rely on in the conclusion. As I understand you, mentalistic (intentionalistic) discourse is to be thought of as an explanatory system accounting for part of the world. Physicalistic discourse which accounts for another part of the world competes as an explanatory system with intentionalistic for its part of the world. You suggest that intentionalistic discourse may be replaced by an enriched physicalistic discourse if the latter provides a better explanatory system than the former.

In what sense, however, is the appropriateness of normative discourse dependent on its explanatory power? In other words, in what sense can the attribution of obligations, rights and the like be explanatory? One might think of the attribution of beliefs, desires, etc. as explanatory because the postulation of such states explains human behavior. Presumably, the explanatory function of the postulation of mental states rests in part on the supposition of causal relations between explained human behavior and supposed entities. What do obligations, duties, rights explain? Human beliefs, desires, intentions, moral sentiments? But how? Moral sentiments might interact with human actions, beliefs, desires, etc. but are obligations postulated entities supposed to causally interact with whatever they explain? You need to state breifly the most plausible lin you can take with respect to the following questions:

(1) What is the supposition of obligations (etc.) supposed to explain?

(2) Are obligations (etc.) theoretical entities, and if so, of what kind?

(3) How do obligations (etc.) explain, that is, what is the mechanism of explanation here?

Let's suppose intelligible answers can be given to (1), (2) and (3). Not all en-minded creatures are subject to obligations, duties and rights. Only those who are appropriately characterized by the rich intentionalistic discourse of agency are subject to norms. Let's suppose that the rich intentionalistic discourse of agency may be replaced by an enriched physicalistic discourse.

(Cf. Davidson and others who try to provide the basis of a physicalistic account of agency.) Are norms excluded from such a physicalistic account? I don't see why. One could give a physicalistic account of agency, but still make normative judgements. Intentionalistic discourse in the form of normative discourse would be eliminated in sense (5) but not in sense (1).

In order for all intentionalistic discourse to be eliminated on the model you suggest all attributions of intentional states must be theoretical attributions. Hence you seem to be committed to claiming that even self-attributions of mental states are theoretical attributions. Since it is apparently false that all self-attributions of mental states are theoretical attributions you should explain how (the mechanism whereby) self-attributions of mental states are like theoretical hypotheses. It would seem that self-attributions are among our data. On your model of theoretical explanation, are even the data theory-laden, or would you say that self-attributions are not among our data? You say that the supposition of mental entities may have no explanatory (predictive) value. Might we still be justified in believing that there are mental entities such as beliefs, even though their supposition has no explanatory (predictive) value? In other words, what reason do you have for thinking explanatory power to be the sole relevant epistemic criterion?

(b) Reply -- (I) The Normative

By my criteria certain expressions involving the normative are intentional (see P. 46, above). The sense in which they involve the mental was explicated in Ch. Three. There remains another problem, however: in what sense does the normative "fit" into the model of

mentalistic discourse as an explanatory system? Several questions arise here. (A) "What is the supposition of obligations (etc.) supposed to explain?" First, actions, as in "He will bring water because he has the obligation to do so, and since he is a good man who knows his duty here, he will not shirk his obligation." "Bringing water" is a straightforward action which anything might perform, but only an en-minded creature could bring water because of an obligation or a promise (which is the taking on of an obligation). Of course, in this case it is not necessary to appeal to obligations. We might have said: "He will bring the water because he wants to help us". In general though, we recognise cases where people do actions which they do not want to do, and even cases where people perform acts which they know will lead to their own deaths. By postulating the "realm of values", the knowledge and recognition of which can greatly influence men, certain facts about human experience and behavior are brought into an intelligible system. Second, certain sensations, as in "He feels guilty because he knows that he shirked his duty/obligations". Feelings are mental in themselves and thus this might be called "second-level" explanation, but there is nothing untoward about such an explanation. Such explanations can be brought to the first-level through a chain of explanatory statements: "He left home as he felt guilty, because he knew that he had shirked his obligations".

In both the above cases the agent is said to know consciously that he has an obligation. This is not necessary for one could explain actions or feelings as being the result of obligations on which the agent need not be consciously reflecting (rather as in bridge, when one responds to a bid of one club with one's five card suit

without thinking about it at all) or which he does not (consciously) even know that he has.

Thus it appears that the normative can play a role within an explanatory system roughly similar to the role hopes, thoughts and beliefs play. Obligations have, however, many properties of their own, as do beliefs. Obviously we may mention some such property without attempting to explain anything. Just as we can say "x has the belief that ..." so we may say "x has the obligation to ...". Although in both cases no attempt at explanation need be made, that does not lead us to deny beliefs and obligations a role in an extensively explanatory system.

(B) "Are obligations theoretical entities, and if so, of what kind?" I would want to avoid calling obligations, and beliefs for that matter, theoretical entities. Beliefs, at best, are somewhat like theoretical entities and I see no reason to deny a similar status to obligations. Obligations are rather more like the atoms of Democritus than like the atoms of Dalton. As there was not even the ghost of a rigorous theory to back Democritus there is no tough-minded theory on which to ground mentalistic discourse. Perhaps in time obligations will become scientifically respectable (not that I think it likely), that is, enter into a mathematically rigorous theory. As to what obligations are, what can I say? They are such that people have them. They are like beliefs in that they influence behavior. They are also like beliefs in that one can be punished for not acting in accordance with them. They are like beliefs, I think, in that one can be ignorant of having them, though here one can point out that presumably to have a belief I must at least be disposed to act

in certain ways in certain circumstances. But there are also (complex) dispositions which accompany obligations as well; perhaps something like: if I act in such-and-such a way then the community (or agents of the community) will do this or that. Such a remark merely brings out the social aspect of obligations which everyone would agree is important.

Finally, (C) "How do obligations explain, i.e. what is the mechanism of explanation here?" The term "explanation" is very vague and I have not tried to use it in any one sense throughout or even to restrict its use to any explicit set of senses. Surely it is enough that if one says "He will bring the water because he has an obligation to do so" one is satisfied that a kind of explanation has been given. One aspect of explanation is that it reduces surprise, in that it leads us to expect that which will, in fact, occur. The obligation sentence above certainly could do that. One can imagine a point in human history -- not that it ever occurred -- where people were surprised when, for example, someone went hungry in order to share what food he had. (Sharing goes too far back for one to imagine that this case was actual. But perhaps there was a point where people were surprised that they were not surprised at "self-less" actions.) Even where there is no surprise there can be <u>wonder</u>: "Of course it happens all the time and warrants no criticism, but <u>why</u> does he share his food with me, a member of the tribe, but not with <u>him</u>, a stranger?" It remains that when someone says: "He feels guilty because he should not have gone through that red light" I cannot resist the feeling that some kind of explanation has been given.

(II) Eliminability of the Intentional

While I leave open the question whether intentional discourse could be eliminated I do not think it should have a necessarily privileged place in our conceptual scheme. As we saw, the normative expressions enter into a system of explanations of actions, feelings and, perhaps, states of affairs. However, there is a vast "overlay" of non-explanatory facets of the normative, as was noted above. The question then arises, granted that we have a physicalistic explanation of actions, feelings and states of affairs, could we also eliminate this overlay? It is clear that if one espoused an emotivist or imperativist view of ethics then the overlay could be eliminated since the normative would be reduced to statements of approval and disapproval (feelings) or commands (actions), both of which could be further reduced to physicalitic terms by hypothesis. On the other hand, if normative features cannot be explicated in such ways then we have prima facie evidence that the intentional cannot be eliminated. The difficulty with this is that with the physicalistic account of nature we have presumably eliminated all reference to the overtly mental phenomena -- in what sense does the necessary retention of the normative demand a certain "mentalism" in our view of the world? First, we must again note that certain normative statements are not intentional, for example, "variety in nature is good". If this sentence is true it states a fact about nature which cannot be eliminated. The normative locutions which are intentional are those which entail that certain things have beliefs, desires, etc. and in this way they demand a degree of mentalism. It should be noted that if the supposed physicalistic account involves some version of the identity theory then the intentional has not been eliminated since

in that case some physical states will have the "aboutness" and enjoin the entailments that made their co-referents intentional. If there are no such things as beliefs, desires and the like then it is hard to see how there could be true (or even intelligible) normative statements of the sort that are intentional. For example, take the sentence, "x has the duty to honor his parents". Now, if x has no beliefs, desires, thoughts, pains, wishes and hopes it is difficult to imagine that he is the sort of thing to which a duty could be ascribed.

I might also point out that if the physicalistic account led us to accept a form of strong determinism, we might well drop the normative as an utterly senseless (in light of the facts) misrepresentation of those "parts" of the world which previously involved the normative (actions by choice, say). This would hold even for the non-intentional normative expressions.

If the intentional is to be eliminated then self-attributions of intentional states must go as well. Is this possible? Of course, it would not do to merely change the words we use. A massive alteration of our conceptual framework would be required in the pursuit of this goal, and it may well be impossible. Computers at present "communicate" without the aid of intentional terms. Can we imagine people sharing (non-intentionally couched) information and just acting accordingly? But, admittedly, the seeming indispensability of systematic intentional self-attributions offers more prima facie evidence for the ineliminability of the intentional. For myself, I make no claim that the intentional will be eliminated and further reflection on such problems may later show that it never will be

eliminated.

Suppose, though, that men reach a stage at which intentional discourse is still employed even though the sort of complete physicalistic explanation of the world mentioned above seems to have been attained. Then would the mental entities and values we ascribe to ourselves (and others) have no explanatory function? On the contrary, it seems that they would, still. We could make predictions, ones which would be largely correct, from our ascription of mental entities both to ourselves and others. Perhaps we believe that when one is said to desire something the proper explanation of what is <u>really</u> going on would involve exclusive reference to certain physical processes which lead one to act in such-and-such ways. In such a situation we are well aware that the story of the physical processes gives us much greater predictive/explanatory power than the "desire-story". We might retain the latter nonetheless, rather as engineers retain Newton's laws since they are an excellent first approximation. In cases where a great precision is required (as in a court of law) we will not speak of desires but of Ψ_i-states, or whatever. We will not try to determine whether x <u>desired</u> the death of his partner, but whether x was in Ψ_{72} at time t_1, and Ψ_{36} at time t_2, etc. Perhaps this would be the preliminary to eliminating even the self-attributions. Imagine a culture that carried small machines that read out (and prominently displayed) the brain state of the carrier: $\Psi_{72} \cdots \Psi_{53} \cdots \Psi_9 \cdots$ etc. Suppose people acted directly (i.e. without thought) from these readings -- the conceptual apparatus involving beliefs, desires and such intentional states might disappear completely.

END

2-9-77